AND RECORDING WORLD

July 1980 60p

STEWART COPELAND On The Beat

Magazine Brand X The Members

Recording World: MXR flanger/doubler Furman RV-1 reverb unit; Editing feature; Roy Thomas-Baker; Ampex Golden Reel Award; R. G. Jone studios;

Tests; And Herb Ellis electric guitar; Levoi
"Macaferri" acoustic; Rickenbacker 4001 bass;
Hoshing Professional drum kit; Logan string synth;
WEM seundman power amp;
Mut/07 Bi Phase and Vol-Wah





Breathtaking Sound! Fantastic Value!





Schecter guitar and bass necks are unparalled, blending vintage feel and playing ability with the beauty of exotic wood grains.



See your dealer or send \$2.00 postage & handling for 16 page color catalog.

SCHECTER GUITAR RESEARCH

Post Office Box 9783 N. Hollywood, CA 91609 • (213) 782-3202

INTERNATIONAL DISTRIBUTORS

AUSTRALIA Ram Music Trading Co., 348 Punt Road, South Yarra 3141 Yarra Melbourne, Australia (03) 267-4418. BeneLux Galama Guitar Customizing, Box 594, Groningen, Holland, 050-770-725. ENGLAND Chandler Guitars, 199 Sandy Combe Road, Kew, Richmond, Surrey, 01-940-5874. FRANCE Nashville Guitar Workshop, 18 Rue de Douai, 75009 Paris, France, 874-66-13, 285-82-47. GERMANY Musik Schell, Postfach 1235, Bleicherelstrasse 2, 7336 Uhingen, West Germany (07161) 38566. JAPAN Moon Corporation, 1F Yamaguchi, Shoji Building, 24-14 Ebisu 1-Chome, Shibjuya-Ku, Tokyo, 150 Japan, SWEDEN Englund Musik AB, Box 610, S-128-06 HAGERSTEN Stockholm, Sweden 08 97 09 20. SWITZERLAND Zenker Musikinstrumente En Gros, Ch-4003 Basel Postfach, Felerabendstrasse 14-22, 061-229996 & 229997, Telex 64831.

CONTENTS

PUBLISHERS

Managing Director Richard Desmand Market Development Director Malcolm Green Executive Director Alan Marcuson Company Secretary David Satter

EDITORIA

Editor David Lawrenson Feature Writer Lynden Barber Supplements Editor Paul Ashtord Project Manager (M&RW Test Studio Ketth Spencer-Allen Editorial Assistant Janel Angus

PRODUCTION

Group Production Manager Date Robinson Production Manager Peter Still Production Assistant Karen Goledek Art Director Harry Delghton Studio Manager David Shaw Artists: Dave Bassett, Aylmer Smyth, Gary Shackman, Chrissle Beilman Photographer Simon de Courcy Wheeler Photographic Assistant Mike Bassett Typesetting Malenka Ltd.

ADVERTISING

Advertising Executive Mark Epstein Circulation Linda Kernan

CONSULTANTS

Robin Lumley, Dr Mark Sawiski MSc (Eng) PhD. C eng, MIEE, MAES, Stephen Delit MIMIT. Ken Dibble MIOA, MAES, Alan Holmes, Tony Hymas, Henry Roberts, Jim Rodford, Dave Mann BSc, Mike Moran

USA

Editor J. C. Costa Production Editor (London) Mike Feasey General Manager Mitchell Haber Advertisement Director Alan Kesselhaut Advertisement Executive Morion Needham Administration Manager Rise Gerstein

GERMAN LANGUAGE EDITION

Editor Michael Kommer
Art Director Thomas Schoiz
Administration Manager Stephen Kersten
European Sales Manager Herbie Katz

LONDON

LONDON
International Musician & Recording World in published monthly by Cover Publications Ltd.,
Grosvenor House, 141-143 Drury Lane, London WC2
STE, TELEX No. 24676, TELEPHONE (91) 379-6342,
(01) 379-6917. Distributed in Great Britain by Thames News Services Ltd., Running Horse Yard, 41-43
Blocktriars Rd., London SEt. Tel: (01) 928-6126/7.
Printed by Woodford Litho Ltd., England.
International Musician & Recording World is a trade mark of Cover Publications Ltd., 4180. While every care is taken in the publication of the magazine, the publishers cannot be held responsible for any results arising from the contents thereof. Subscriptions, 12 months only. UK: 28.
Worldwide (surface mail) £413.00. US (includes 12 issues, shipping charges to New York, NY and mailing costs from NY): S22. Second class postage pald at New York, NY and all additional mailing offices. Air mail rates Europe: \$19,00. South America and South Africa: £26,00. Australia and Japan: \$22.00.

International Musician and Recording World SALES AGENTS

NEW YORK

NEW YORK 19th Floor, 1500 Broadway, New York, NY 10036 Tel: (212) 921 9050 (six Jines) Telex: (230) 645459

SWITZERLAND

Badger Publications S.A., Rue de L'Industrie 16, 17 Fribourg 5 Switzerland Tel: (037) 244 470 Telex: 36450

Sole International Distributing Agents Gordon & Gotch (Canado) Ltd., 55 York Street, Toronto, Ontario MSJ 154, Canada Gordon & Gotch (Australasia) Ltd., Melbourne, Sydney, Brisbane, Adelaide, Perth Gordon & Gotch (NZ) Ltd., Wellington, Auckland. Christchurch, Dunedin Central News Agency Ltd., South Africa.

SPECIAL FEATURES

54 The Members

We ask guitarists JC and Nigel Bennett how they get the "sound of the suburbs".

96 Magazine

One of the more interesting bands to emerge from the late Seventies. Lynden Barber talks to the men behind Howard Devoto.

102 Rockin' Dopsie

Find out all about Zydeco music from its chief exponent, Paul Ashford will have you rockin' and reeling.

60 Brand X

Britain's premier jazzirock outfit tell us how they succeed in an American dominated market.

152 Freedmans

A focus on a premier London dealer.

RECORDING WORLD

109 Contents

REGULAR FEATURES

- 27 Letters
- 29 Buzz
- 31 Trade News
- 32 Albums

147 Dealer of the Month

Rhythm House of Stockport,

148 PA Column

Genesis in concert.

156 Hi Fi for Musos

160 Spotlight

We cast our eye over Essex and East Anglia.

164 Market Report

We hear what the dealers have to say about Aria guitars.

TEST SECTION

66 Guitarcheck

A two-in-one from Stephen this month, first of all an Aria Herb Ellis electric followed by a Levoi Macaferri.

72 Soundcheck

Mark Sawicki puts a WEM Soundman power amp through its paces.

76 Synthcheck

The Logan string synth.

78 Effectscheck

A Mutron Bi-Phase and Wah Wah come under our trusty feet.

80 Speaker check

Ken Dibble introduces a new series on compression drivers.

DRUM SECTION

84 Drumcheck

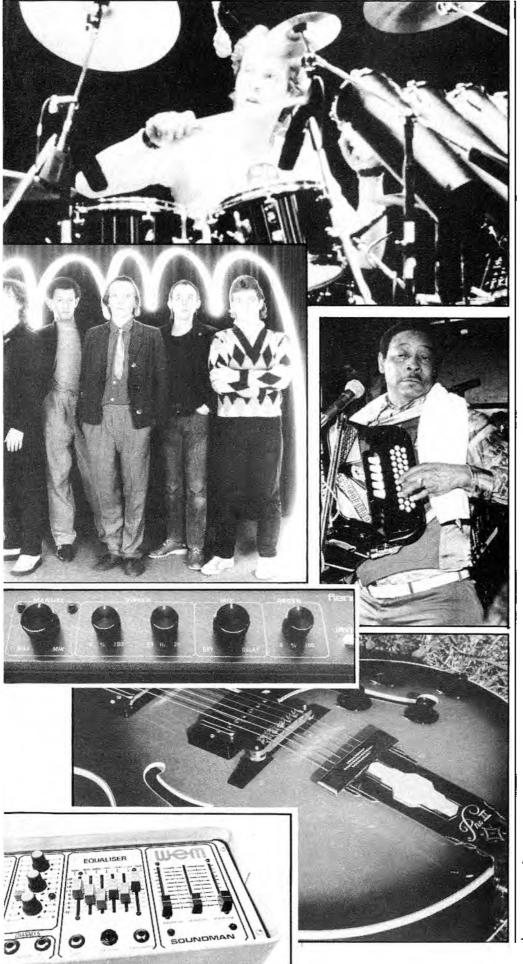
A Hoshino Professional kit comes under scrutiny this month,

87 Drum News

Information on the Neary drum torque among other interesting items.

88 Stewart Copeland

The man behind the Police beat explains his approach to drumming and the use of effects which has made him one of the most interesting drummers on the scene



Editorial

This month we feature Stewart Copeland, of that fab trio Police on the front cover. In many ways their success over the past 12 months has been remarkable, but it is a story which should give heart to musicians.

All three had been around the music scene for some time before the formation of Police and all three are excellent musicians. The fact they financed their own trip to America and gigged incessantly to make it, is an object lesson to any band.

Apparently one of their best gigs over there was to just three people, which says much for their professionalsim, I suppose like many I was sceptical when they returned to this country, but two gigs convinced me they were no one-hitwonders.

They score on many levels, not least being their musicianship. They have proved that you can make it by hard work and talent. I wish them well.



National Association of Music Merchants

Serving the Music Products Industry

606F QI2 527-3200



VOLUME 6 No.7 JULY 1980(UK) AUGUST 1980(US)

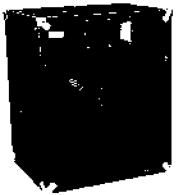
66 VICTORIA ROAD-ROMFORD **ESSEX-ENGLAND** TELEPHONE: ROMFORD (0708) 25919

SONUCINE/AS NOM:

After four years of specialisation in the PA field we can now reveal a new range of high power. professional PA stacks available direct to you at manufacturers prices. These stacks are not toys - they are made from heavy duty plywood and are fitted with crossover networks where appropriate. Our experience and reputation in this field speaks for itself (ask our many satisfied customers) and our prices are unbeatable.

HIRE? WHEN YOU CAN BUY YOUR OWN PA FOR AS LITTLE AS:

1 KILOWATT, 12-Channel Rig Complete - £21.00 per week; 2 KILOWATT, 16-Channel Rig Complete - £29.00 per week; 2 KILOWATT, 16-Channel Rig with RSD Mixer and Amp - £37.00 per week (also see rates below) (2 years repayment; Subject to Hire Purchase acceptance)



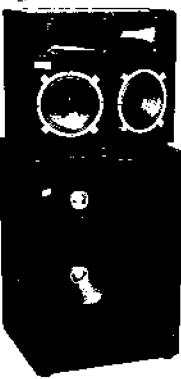
SHORT THROW RIG N/400 Pair of Full Range Cabs Total 400 watts £445 inc vat (£5.78 per week) RIG N/700 Pair of Full Range Cabs Total 700 watts £565 inc vat (£7,34 per week)



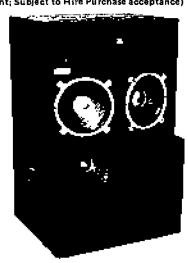
ONG THROW RIG L/400 Pair of Full Range Cabs Total 400 watts £445 inc vat (£5.78 per week) RIG L/700 Pair of Full Range Cabs Total 700 watts £565 inc vat (£7,34 per week)



SOUNDWAVE PA & LIVE SOUND CATALOGUE STILL THE MOST COM-PREHENSIVE CATALOGUE OF EVERYTHING YOU NEED IN PA. Now with supplement giving details of new rigs. Send a large stamped addressed envelope (17p) or 3 International reply coupons.

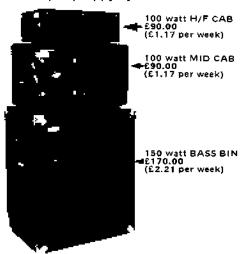


RIG G/1100 Pair of Mid/high Cabs Pair of Bass Bins Total 1100 watts £760 inc vat (£9.88 per week) RIG G/2000 Pair of Mid/high Cabs Pair of Bass Bins **Total 2 Kilowatts** £1085 inc vat (£14, 10 per week)



R1G F/600 Pair of 3-Way Full Range Cabs Total 600 watts £585 inc vat (£7.60 per week) RIG F/1000 Pair of 3-Way Full Range Cabs Total 1 Kilowatt £715 inc vat (£9.29 per week)

NEW SUPER ECONOMY RANGE





*FREE DELIVERY ANYWHERE IN THE UK MAINLAND *

MIXERS, MIKES, POWER AMPS, CROSSOVERS, EQUALISERS, MONITORS-AT LOW PROFESSIONAL PRICES-ALL ON PERMANENT DEMO AT OUR SHOWROOMS RING NOW OR SEND A LARGE 17p SAE FOR DETAILS.



66 VICTORIA ROAD-ROMFORD-ESSEX-ENGLAND

TELEPHONE: ROMFORD (0708) 25919

J WANT A BA NE 0708-25

LET'S BE HONEST - WE WANT TO SELL YOU YOUR NEXT BASS GUITAR Whether it's an Alembic, or a beginner's job, we think you should buy it from us

Here are just some of the reasons:

CHOICE — We have the largest selection of bass instruments in the country ACTUALLY IN STOCK (see below). You can try them all and choose to suit your budget

PRICE - Because we specialise in bass equipment we can offer the lowest professional prices on

EASY PAYMENT - Hire Purchase, Access, Barclaycard - Ring for immediate despatch

FREE DELIVERY - Anywhere in the UK mainland

EXPERT ADVICE — On strings, customisation, effects units etc.

REPUTATION — We have one of the best in the business. No rip-offs. No cheap tricks, 100% reliability

MONEY-BACK GUARANTEE — on any unsatisfactory item

OUR RANGE INCLUDES: ALEMBIC HS ANDERSON ARIA BOZO PETER COOK SD CURLEE FENDER GIBSON GUILD HAGSTROM HOFNER HOHNER IBANEZ MUSIC MAN OVATION PEAVEY PURLE RENAISSANCE BC RICH RICKENBACKER SHERGOLD CARL THOMPSON WAL WESTBURY YAMAHA ETC

The best bass guitar amplification anywhere in the world

POLYTONE - Mini-Brutes 1, 11 & 111 plus 101 and double bass and guitar pick-ups all in stock at low professional prices

and we do mean the best

TRACE ELLIOT BASS STACKS

are for the professionals. They are no lightweights and they are not cheap.

But they do the job.

Amplifying low frequencies is a science of its own and there are no short-cuts.

You need big power amps and heavy duty speakers and cabs. Illustrated are just two of the many options available from a truly comprehensive range.

We are serious about it. If you are too, send for details NOW.





fact: the PRO MASTER™sound system is not an evolution... it's a full-blown REVOLUTION!

The PRO MASTER modular sound system ushers in a new generation of sound system versatility, reliability, and quality for today's entertainers, musicians, and speakers—for use in settings as diverse as intimate clubs, lounges, large auditoriums, churches, and schools. Its multitude of performance-proven features is the result of sophisticated computer design techniques, advanced materials, and countless hours of personal consultation with performers and sound technicians.



Revolutionary New Console

Finally! The best of *both* worlds. A console so easy to use that it won't overwhelm the beginning group, yet with the advanced features and capabilities required by experienced professional performers—such as pre-fader monitor mixing, effects and/or built-in reverb, with their own tone controls, LED clipping indicators with attenuators on each input, and full patching facilities for every system component. Super power: *twin 200-watt solid-state power amplifiers!* Doubles as a stereo recording console for groups that want to "lay down a few tracks" without paying for studio time, or can be used as an ultrasophisticated keyboard mixer with power. Unitized ARMO-DUR" structural foam combination case and chassis makes it more durable than stee!. Ultra-fight: only 47 pounds.

Revolutionary: Adjustable Dispersion Sound System

Advanced new variable dispersion high-frequency horn system projects your sound—everywhere in the house, giving you a choice of 60° long-throw, or 120° wide-angle dispersion with the twist of a knob. Tailors the sound to the room—even L-shaped rooms.

Revolutionary New Loudspeaker

Every extra ounce—every unnecessary cubic inch—has been computer designed OUT of the PRO MASTER loudspeaker. Modern materials and moulding techniques accommodate a high-performance 15-inch woofer and high-frequency horn and compression driver in a startlingly small, efficient enclosure. Less than 28 inches high, 23 inches wide, 16 inches deep. Weighs an easy-to-handle 58 pounds. Yet, the power handling capacity is a remarkable 150 watts, and the frequency response is 50 to 15 kHz.

PLUS...Revolutionary: FEEDBACK FINDER™/Equalizer PATCH BLOCK™ Patch Panel LED Status Indicators



Shure Electronics Limited, Eccleston Road, Maidstone ME15 6AU—Telephone: Maidstone (0622) 59881



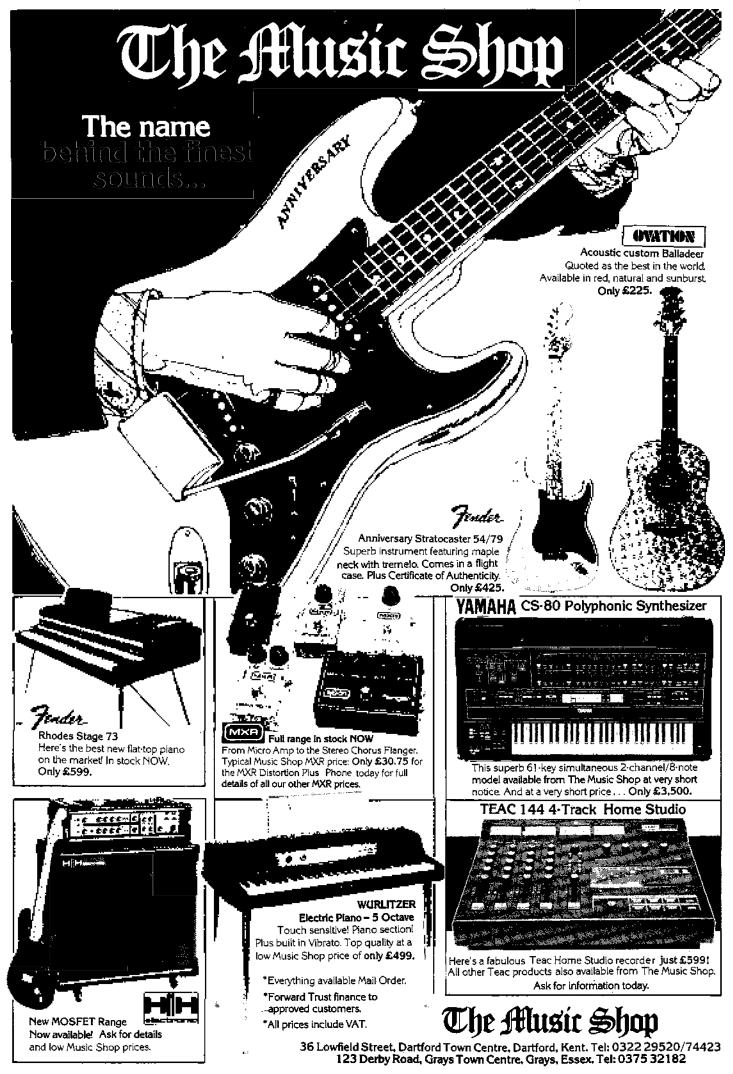
...THE DRIVING FORCE BEHIND THE UNIT 8 RANGE.

OUR ALL NEW PRODUCT RANGE INCLUDES THE UNIT 8/11 50 WATT COMPRESSION DRIVER, HORNS, LENSES, ADAPTORS...

SOUNDS INTERESTING . . ? CALL 01-568 6633







NEW! MORLEY power amplifier has a big mouth

(It's a Volume pedal too!)

This amazingly unique 8 pound, multi-purpose portable amplifier-volume pedal shouts with David-Goliath roars that slam the amplifier industry out of a decade of doldrum copycat products. You use Bigfoot as a solo amp, in conjunction with and to master control other remote amps, or straight through as a volume pedal.

It pays off fast, loud and clear with sounds and distortions that range from the savage, snarling fury of a wounded jungle cat to a sound as clean and pristine pure as the driven snow. Use it with your own choice of any speaker system of 4 ohms or more. A neat option is a choice of Electro-Voice or Eminence speakers or of an empty enclosure for your own speaker.

Quality performance, power, and packaging make Bigfoot ideal for studio sessions and live gigs and you tote it into a club or outdoor arena as easily as you tote your digarettes. Here's more that's new with Bigfoot:

- 25 watts rms sinewave continuous superclean output or 50 watts of square wave, impact power.
- Photoelectric Volume pedal controls volume of the amplifier.
- · Silent circuit AC on-off switch no clicks, pops, thumps.
- Output jack for driving external amps or direct recording.
- · Volume, treble, bass controls plus treble and bass boost footswitches.
- Tube type sound, clear sound, soft distortion, hard fuzz.
- · Short circuit protection.
- Overload indicator lamp.

We build them failsafe because your career depends on it and so does ours.



Morley — the opto-electronic failsafe pedals no pots, gears, or batteries.

6855 VINELAND AVENUE NORTH HOLLYWOOD, CA. 91605 (213) 760-3140

Send for our Free (Morley, 6855 Vine): No. Hollywood, CA	and Ave.,
Name	
Address	
City	
State	Zip

The R.S.D. 12/2 mixer is a professional desk design to provide close control over sound in small situations. Unlike most other desks, however, you don't have to junk the R.S.D. 12/2 when the venues get bigger and the money gets better. The R.S.D. expander modules allow you to add four channels at a time. You could end up at the Hollywood Bowl with a 32/2 R.S.D. desk still using the same basic R.S.D. 12/2 mixer you bought a year before (if only it really happened that quickly!).

The 12/2 offers input attenuation allowing you to provide mike, D/I or line input into any of the channels, full equalisation on each channel,

foldback mix facilities, effects or echo send and return and full stereo pan control. A PFM button allows the engineer to listen to any channel on its own at the touch of a button and naturally there are separate

ONE STAGE



channel, fold-back and the stereo outputs. Twin VU meters offer a visual indication of levels. If all this sophistication sounds a little heavy for

a small

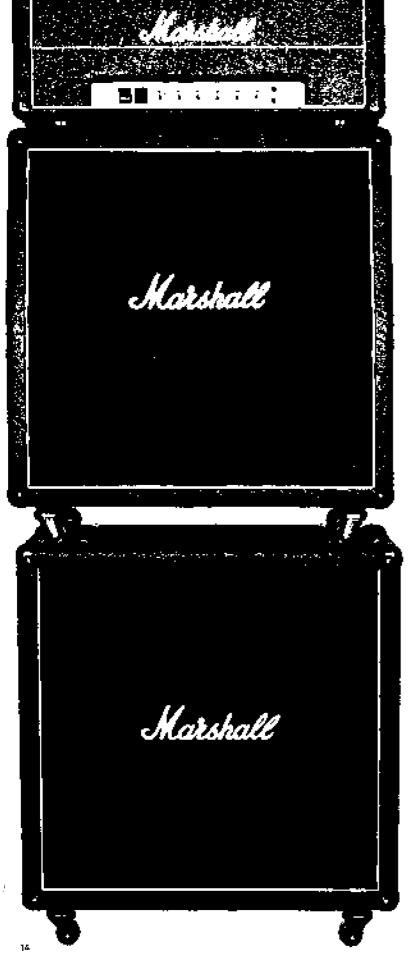
AT A TIME

12/2 mixing board, remember that the basic concept is EXPANDABILITY. R.S.D. 12/2 desk that's produced is fit and ready to become a 32/2 the next day if required:- Without increase in noise, without any loss of facilities and without costly "main frame" work becoming necessary.

The benefit to you is clear. Start with a professional mixer that's the right size for your performances. As you grow it can grow with you and instead of accepting insulting trade-in terms for your old mixer you'll always be able to keep control of your sound and your costs.



slide faders for each input



STACKS OF POWER

Marshall is still Number One!

British rock music dominates the world scene, and it's no surprise that the Marshall stack, originally exclusive to rock's elite, is now the first choice of musicians in the USA, and Japan, as well as Europe and the UK.

If you've never played a Marshall stack you're missing out on one of music's great and lasting thrills.

Stacks of Power: that says it all!

Marshall now produce a range of 7 valve heads:

1959 100W Super Lead 1987 50W Super Lead 2203 100W Master Volume 2204 50W Master Volume 1992 100W Super Bass 1986 50W Super Bass 2959 100W Reverb and Boost

4 x 12 cabinets are available in 4 different specifications, all fitted with Celestion speakers developed specially for Marshall.

1960 and 1960B 100W Lead/Keyboards 1935 and 1935B 100W Bass/Keyboards 1982 and 1982B 120W Lead/Keyboards 1984 and 1984B 120W Bass/Keyboards



Rose, Morris & Co., Ltd 32-34, Gordon House Road, London NW5 INE Tel: 01-267 5151

"Performs favourably in comparison with other makes twice the price"

That's what Musician's Only said recently about the X-911 synth, purpose built by Korg for today's guitarist.



Only Korg have been able to come up with a guitar synth that's vice-free, stable and packed full of effects and controllable voices.

Using your own guitar and a normal guitar lead, the X-911 allows quick precise adjustment, with a wide range of preset voice selectors and tone controls, Imagine the combination of your guitar sound with electric bass, slow attack violin and a funky synth sound — simply by pressing the presets. There's a choice of optional footpedals too, to add to your dynamic control.

All things are possible with a Korg X-911 at a recommended retail price of £325 inc. VAT.

- Input level adjustment.
- Tuning, octave selection, and interval adjustment (of VCO).
- Portamento adjusts time lag between notes.
- Synthesizer signal selection and VCF control.
- Power on/off switching and volume control.
- Instrumental sound selection and parameter adjustment.
- Synthesizer tone color selection and envelope adjustment.
- 8 Input jack for connecting guitar or other
- 9. Output jack for direct sound from electric
- 10 Connection jacks for foot switches used to turn effects on and off.
- 11. Cancel switch to turn off all tone color
- 12. Volume balance between instrumental and
- synthesizer sections.
- 13. Output jack.

switches at once.



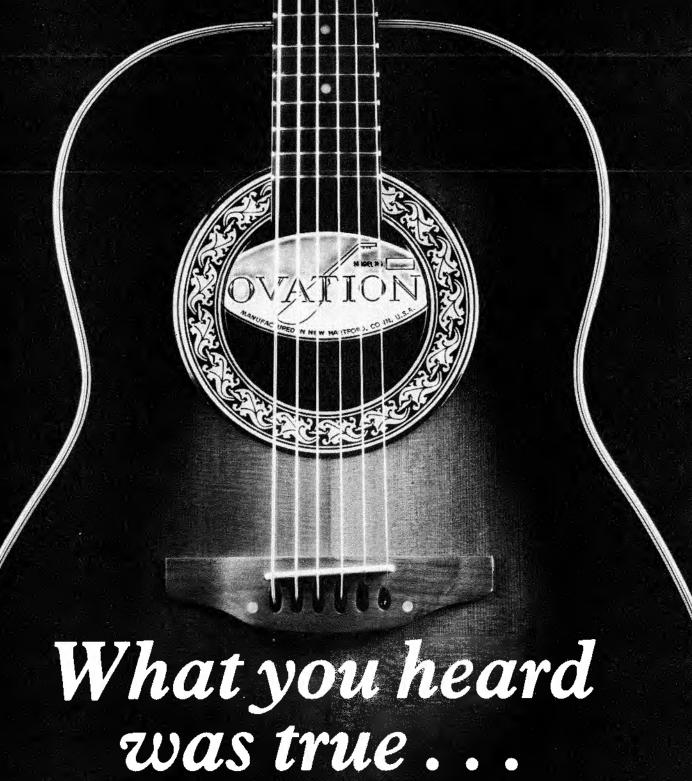
To Rose, Morris & Co Ltd., 32-34 Gordon House Road, London NW5 1NE.

I would like to know more about Korg synthesizers, please send me all the latest information and brochures.

Korg Products are available at all good Music Stores. Korg Key Centres maintain comprehensive stocks, a demonstration facilities and give specialist advice.

Name.....

Rose-Morris KORG



Ovation Acoustic and Acoustic-Electric guitars. Your ears know that what you heard was true.

Guitar Preparation Document

When buying your Ovation guitar make sure it carries the Rose-Morris Ovation Guitar Preparation Document.

This is your guarantee that the instrument is fully warranted in the U.K.

If you are in any doubt, call us on 01-267 5151 quoting the serial number and model number – oh, reverse the charges of course.

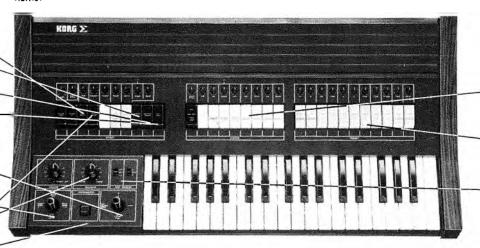


Rose-Morris are the exclusive distributors of Ovation guitars in the U.K. and Eire. Rose, Morris & Co. Ltd., 32 Gordon House Rd., London NW5 1NE Tel. 01-267 5151

Two more reasons why Korg synthesizers lead the world.

Korg are rightly regarded as the world's leading synthesizer manufacturer by many top musicians. Their amazing ranges of controls and effects give versatility far beyond the reach of most other synthesizers. This, combined with their tuning stability, reliability and unbelievable value for money, means that Korg lead the way in electronic music on stage, in the studio or at home.

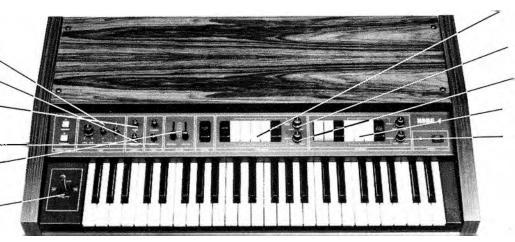
- Octave Selection switches.
- 2. Quarter tone
- 3. Multiple trigger
- 4. Keyhold.
- 8. Joystick for high low pass filter.
- Programmable joystick control for pitchbend and modulation.
- 10. Volume balance.
- 11. Portamento.



- Synth section with parameter adjustment.
- 6. Instrument section with parameter
- Programmable touch sensitive keyboard.

KORG SIGMA A monophonic synthesizer giving superb performance on stage, in the recording studio and at home. The eleven instrument and eight synth presets can each be individually adjusted to give exactly the sound you want to hear. But the unique feature of the Sigma is that all nineteen voices can be played together. Optional footpedals too, for even more tonal, pitch and volume variation. Use the Sigma to control other synths or as an input for sequencers. And all this for only £699 inc. VAT — far less than any other comparable instrument!

- Tunable oscillators.
- Key click, electric piano.
- Brass cut off frequency.
- Ensemble and percussive tone control.
- Mixable volume control.
- Joystick control of pitchbend and chorus phase.



6. Percussive

7. Tremolo speed

8. Decay length

9. Ensemble section.

10. Attack/release.

KORG LAMBDA A fully polyphonic synthesizer with two separate groups of voicings, percussive and ensemble, all instantly selectable and fully mixable to provide as many separate tone colours as you need — simultaneously from one keyboard! Separate outputs from the two groupings allow a full stereo effect and the joystick and optional footpedal controls give wide tonal variations. R.R.P., £999 inc. VAT at your Korg Key Centre.



To Rose, Morris & Co Ltd, 32-34 Gordon House Road, London NW5 1NE.

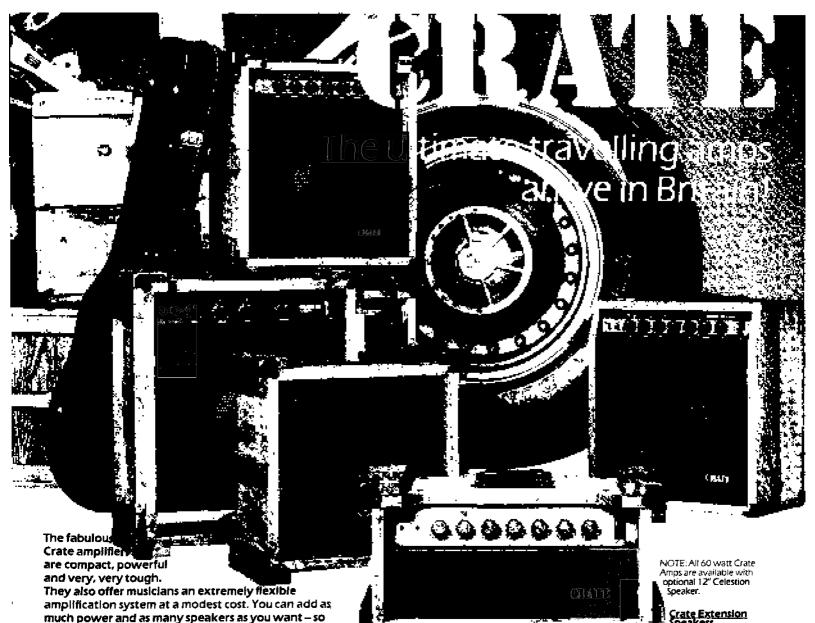
I would like to know more about Korg synthesizers, please send me all the latest information and brochures.

Addres:









Crate amps and speakers are in solid wood cabinets with steel corners and handles, metal grills and 18 gauge steel chassis. Many other great features are described for each model.

there's no need to invest immediately in expensive

Now you can get Crates in the UK - at our very low

direct import prices.

gear.

Crate | Series Small and Powerful These 20 wat RMS amps all feature solid Ponderosa Pine Cabinets with 10" or 12" Magnum Projector Crate Speakers, Each amp has a line out for use with a separate power amp or plugging into a console mixing board.

No. CR-M - Crate Mini

A low cost Crate with separate gain, treble, bass and master volume controls. 20 watts RMS, 10" Crate Magnum Projector Speaker,

No. CR1 - Standard

20 watts RMS with 12" Speaker, Two inputs, gain, treble, bass, and master volume control. Separate line out, Ponderosa Pine Cabinet.

COMING SOON

New Crate Compact with Celestion E3191

Deluxe Channel Mix Crate E299

with Celestion E339)

No. CR-1D Deluxe £129 Features 20 watts RMS with 12" Speaker. Special bright switch and distortion control with foot switchable

distortion. Gain, treble, bass, master volume, Line Out.

No. CRIR - Reverb £139

20 watts RMS with 12" speaker. Two inputs, gain, treble, bass, and master volume, Reverb

No. CR-1RO Deluxe Reverb £149

20 watts RMS, 12" Crate Speaker with Reverb. Bright switch. Distortion potentiometer plus distortion font switch lack Gain, treble, bass master volume and reverb controls Line Out.

Crate Il Amps in Ponderosa Pine <u>Cabinets</u>

These compact 60 watt RMS

amps have all the features demanded by the working musician. Bi-Fet low noise integrated circuitry delivers integrated circuitry delivers the tonal walmth of a tube type amp. Mid Range Frequency Analyzer acts like a mid range parametric. Line in, line out for effects looping and a bright switch that gives a 20db treble boost. Available with a 12" Crate Speaker or British Celestion

No. CRII -- Crate Lead

£169 60 watts RMS. Active tone controls with gain, treble, mid frequency, mid level, bass, master volume, bright switch, 12" speaker. Extension speaker jack plus line in, line out. Power transistors are attached to an external finned heat sink. No. CRIIC With Celestion

No. CRIIRP Lead/Reverb

60 watt RMS amp with 12" Speaker and same

specifications as Model CRII Has reverb, gain, treble, mid frequency, medium level, bass and master volume control. Solid Pine Cabinet. No. CRIIRPC With Celestion

No. CRIIRH 60 Watt Head £159

Now you can buy the Crate "Brain" separately. This rugged 60 watt RMS chassis comes complete with Accutronix reverb. Has line in and line out for effects looping. Same controls as found on CRIIRP.

No. CRI-B New Crate Bass

By popular demand, here is the moderately priced Crate Bass which delivers a driving punch through a specially designed ported cabinet. Has 20 watts RMS and a 12° speaker with a 30 ounce magnet. Controls include gain, bass, treble and master volume. Line Out. Solid Ponderosa Pine closed back

CRIIR Crates Solid Oak

These 60 watt compact amps are housed in solid oak cabinets. The more road wear you give them, the better they look. Whether

you're in the studio or on stage, you can be sure that these Crates will deliver the ounch that will blow emaway. Hard driving power, night after night, session after session.

No. CRIIRS Stained Oak

£209 Rich Oriental Teak stained solid oak cabinet, 60 watts RMS of driving power. Reverb, 12" Crate magnum, projector speaker. Mid Range Frequency Analyzer acts like a parametric. Bright switch gives a 20db boost for incredible highs.
Separate finned external heat sink keeps power No. CRIIRSC With Celestion

No. CRHRN Natural Oak

This compact 60 watt Crate is housed in a patural oiled solid oak cabinet which has distinctive Scandanavian look. Reverb, 12" Crate speaker, master volume, treble, mid range frequency, mid level, bass, master volume Line in - line out jacks plus extension speaker jack. Super bright switch No. CRIIRNC With

Ceiestlon

Crate Extension
Speakers
These powered and non
powered Crate speakers are center pieces for the Crate system which allows you to add more power and more tonal versatility at a very modest increase in cost.

No. CR-KS Crate Kicker

Excellent for add on power to your present amp. Ideal as a powered monitor speaker at an incredibly low price. This 60 watt RMS power extension speaker has a 12" Crate Magnum Projector Speaker, Three coloured LED's let you know if your amp is coasting at normal or in a clipping mode. Separate volume control for power regulation. Front panel input and output jacks for daisy chainin chaining.
No. CR-K\$C With Celestion £189

No. CR-EX Extension Speaker £59

Use this budget priced separate speaker enclosure to increase your sound level. When used in conjunction with any Crate II Series amp, you'll get more power and a marked increase in punch with the addition of the 12" speaker enclosure. No. CR-EXC With

58/60 Oldham Street off Piccadilly Manchester M4 / LE Tel: 061-236 6794

88 Chalton Street off Euston Road London NWI IHI Tel: 01-388 4094



HOW EVERYBODY CA

NEW — The first time these top American amps available in U.K!



Available

- * EACH CHANNEL: one high gain input, one low gain input, volume bass, treble, panning, effects (internal reverb or switchable effects send).
- PATCH PANEL: stereo auxilliary inputs, stereo recording outputs, effects send, effects return (may also be used as monaural aux. input).
- * REAR PANEL: three way power switch, stereo speaker outputs, line fuse, stereo speaker fuses, line cord retainers, accessory AC outlet.
- * PLUS: colour coded control knobs, woodgrain side panels, optional leatherette carrying case.

88 Chalton Street off Euston Road London NW 1 HJ Tel: 01-388 4094 58/60 Oldham Screet off Piccadilly Manchester M4 I LE Tel: 061-236 6794

IN AFFORD A MIXER





The extraordinary custom-built Curlees atextraordinarily low prices

Genuine, original American-made models

(The 'USA symbol' on head is your guarantee of authenticity)

S.D. Curlee guitars have a worldwide reputation for the superlative craftsmanship and response of their instruments.

Set-in, bolt-on, double octave necks with the bridge and pickups mounted into the neck piece a brass anchoring plate to brace the neck and enrich sustain . . . gold Grover machine heads . . . Di Marzio pickups located in their own harmonic arrangements . . . selected natural hardwoods – mahogany maple or walnut bodies and maple or walnut necks – highlighted with seven full coats of hand-rubbed lacquer finish . . . all solid brass hardware . . .

These are just some of the fabulous features that go into the handmade quality of S.D. Curlee guitars and basses. You've only to see the graceful lines and lovingly produced

finish to appreciate the magnificence of the S.D. Curlee. At our prices, these supreme instruments are truly a "gift".

\$D Curlee Lead Guitars	Our Prices
Standard I, II & III	£299
Yankee	£299
Liberty	£349
Butcher	£399
Summit	£449
Curbeck	£349
\$D Curlee Bass Guitars	
Standard I	£299
Standard II	£349
Yankee I	£299
Yankee II	£399
Liberty	£349
Curbeck	£349
Butcher	£399
Summit	£449



22 Chalton Street off Euston Road London NWI IJH Tel: 01-387 7626

58/60 Oldham Street off Piccadilly Manchester M4 ILE Tef: 061-236 6794

88 Chalton Street off Euston Road London NWI [H] Tel: 01-388 4094



B.C. RICH Introduces

SOMOFARICH®

The first in a series of new Guitars and Basses



BC Rich Lead Guitar	
Bich double neck	169)
Bich	999
Mockingbird Super	889
Mockingbird Standard	689
Eagle Supreme	899
Eagle Standard	699
Son of a Rich	
Son of a Rich with trem BC Rich Bass Guitar	449
Mockingbird	699
Eagle	605
Son of a Rich	700
	No. of the last of

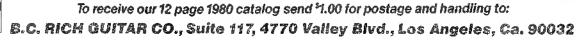
We proudly announce The London Guitar Center is the distributor of B.C. RICH products in the U.K.

88 Chalton Street off Euston Road London NW1 01-388 4094



58 Oldham Street off Piccadilly Manchester 4 061-236 6794











YOU'VE GOT RHYTHM—AN

The Multivox Rhythm ACE FR-3

Until recently, most musicians regarded rhythm units as a sort of jumped up metronome. But the recent advances made in electronics and the increasing demands made on today's drummers have brought these units right back into popularity.

Leading this return is the new FR-3 Rhythm Ace from Multivox. This incredibly versatile unit can recreate twenty basic rhythms at the flick of a switch, which can then be adapted utilising the sensitive Tempo facility.

By keeping this unit as simple to operate as possible, Multivox have created a unit that is ideal for live work, where an easily variable, versatile unit is a necessity.

The control panel of the FR-3 Rhythm Ace is laid out to bring every control quickly and easily to hand, the lower controls are the basic rhythm selectors in a twin-level layout with a simple selector between the levels. The lower level contains; habanera; rock; jazz; cha-cha; Latin rock; ballad; merengue; and rhumba. While the upper level contains; waltz; foxtrot; tango; disco; swing; mambo; bossa nova; slow rock; samba; and beguine. All these can be controlled via the tempo selector giving almost limitless variation. Up to two of the presets can be utilised at any one time to give an incredible number of basic rhythms to work

All these, coupled with a massive eight instrument

sounds, plus a balance control to vary the tone colour makes this one of the most comprehensive rhythm units available.

To aid musicians who will use this unit in a live situation, Multivox have also added a tempo visual indicator, which can operate while the unit is silent, enabling you to set the rhythm before switching the sound into the main PA. Instantaneous start is operated either by the touch switch, located on the top of the unit, or by a foot switch, connected to the rear of the unit.

Operational in all situations the FR-3 Rhythm Ace can be coupl-

ed either to the stage amps or to your own audio system using either the High or Low outputs respectively.

Of course every rhythm unit has its limits, so Multivox have made the FR-3 part of a complete 'family' of rhythm units ranging from the FR-3 (the most popular unit) right up to the FR-8 (perhaps the most sophisticated unit available). So, should you manage to exhaust your imagination on the FR-3, you can move on to the FR-4, then perhaps the FR-6, and eventually the FR-8. Pleasant Journey!



LONDON SYNTHESISER CENTRE

LONDON: 22 and 88 Chalton Street, (off Euston Road), London NW1. Tel: 01 · 387 7449 01 · 387 7626 MANCHESTER: 58 Oldham Street, (off Piccadilly), Manchester 4. Tel: 061 · 236 6794

ID ECHO—WITH MULTIVOX

Leading the current trend towards highly sophisticated echo effects, Chase Musicians announce their new stock of Multivox echo machines. These are top professional models, rugged enough for the road, sensitive enough for the studio, they offer extraordinary flexibility and versatility with a clean noiseless response.

Multivox MX-312 Multi Echo Chamber

Many musicians swear by the simple, but effective 'tape loop' system, where the sound is recorded on one head and is returned by a series of playback heads following on in sequence. There are many of this type of unit available, but now Multivox have updated this basic design to include the very latest in echo and reverb technology and produced the MX-312 Multi Echo Chamber. No compromise has been made in the design and production of this exceptional echo machine.

Featuring 4 playback, 1 erase and 1 record heads the MX-312 is fitted with a comprehensive quota of 8 mode selectors, providing the performer with almost limitless echo and reverb sound, either individually, or in any combination.

Single or multiple recordings can be made using the Multi Echo's incredible 'Sound on Sound' facility, giving single or plural multiple release of the inpout signal, in simple terms — one of the most comprehensive tape echo units available!



These are just a few of the multitude of facilities and effects available to the performer on the Multivox MX-312 Multi Echo Chamber.

Multivox MXD-5 Analog Delay

For those who prefer Analog delay systems, the LSC offer the Multivox MXD-5 Analog Delay. This rack mounting unit is specifically designed to interface with other effects systems, amplifiers and recording and PA mixing desks, boasting a full complement of Reverb, Repeat, Echo and Delay facilities as well as a five base vertical LED visual indicator system for fast, simple recognition of the input level and

the input overload.

The intensity of the reverb and echo facilities are individually controllable, with the maximum decay time of the Reverb section a massive three seconds!

Separate outputs for Echo and Direct Sound and Echo mixed, an echo delay time of 20 to 200ms, plus complete EQ of the echo and reverb signals make the MXD-5 one of the most advanced and capable analog delay units available today.

Both of these units have been chosen as a mail-order bargain from Chase Musicians, bringing quality, professional echoes direct into your home.

Leading the trends, Chase Musicians bring echoes bouncing back!

RES

Registered in England No. 1084986

VAT Registration No. 116 2430 11

39 Radford Road, Hyson

NOTTINGHAM
Telephone 704820

Directors S H Mercer S Mercer K Woodcock

LETTERS

Talking Speakers

Dear Sir:

Belated, but I hope of interest to musos, here's some comeback on Ken Dibble's multitudinous scribings:

The Calrec 600 series mikes discussed recently are truly excellent, the only problem being the need to provide 45 volts, and to be able to provide it in a reasonably foolproof manner so that your best Beyer or Shure doesn't go up in smoke!

If you take a 45 volt rail to your deak or stagebox, the best bet is to use a four-pin XLR (or other esoteric connector) solely for the Calrec. If the Cairec frequently needs to be plugged into anything, then a good solution is to make a remote power supply with four-pin XLR. An adjacent three-pin XLR carries the unbalanced output wires; a standard three-pin XLR lead can then be used to connect the remote power supply/adaptor box to the input on any other item of gear.

On the subject of the Speakercheck series, six per cent distortion on a 15-inch driver sounds terrible, but is it really? The Gauss speakers, which were reprimanded for high distortion at their rated power were probably intended for use by guitarists, in which case the distortion would be very welcome in most cases. If the drivers are used in PA applications, typically crossing over between 100-300Hz, the distortion is probably nothing to worry about.

Over 20 years ago, James Moir found that 25 per cent second harmonic was generally inaudible below 100Hz, whilst three per cent was only just detectable at 200Hz. Similar figures apply to the third harmonic. If you load a bass horn with a Guass speaker and feed it a legitimate 400 watts, the SPL will cause about 10-20 per cent air overload distortion in the horn, so five per cent in the driver is nothing to worry about. On a good four or fiveway sound system, you can hear grossly distorted bass, but it doesn't worry the ears at all, provided the midrange and treble are dead clean,

Finally, a bass speaker with relatively high levels of second and third harmonic distortion can add "punch" and "guts" to a sound system. While this is blasphemy to the gods of high fidelity, the overtones present many well mask far nastier sounds, such as high order harmonics, and can enhance the character of a sound system.

These comments are in no way intended to dispute Ken Dibble's method of testing the power of a driver, but merely to allow readers to judge drivers exiciting high distortion with an unprejudiced eye.

Long may the Speakercheck series continue!

Ben J. Duncan (B&J Sound)

ROLAND RESPONDS

Dear Sir:

I was rather surprised when I read the somewhat negative review of the Roland RS-09 Organ/Strings by Mr Robin Lumley in the January issue of your magazine. Among other things, I felt that it was rather unfair to continously compare the RS-09 with the Roland RS-202, since they were not designed to be in the same category or price range. The RS-09 was not designed as a base keyboard, but was designed to become part of a multi keyboard system, or to produce fill-in harmony and orchestration in a recording

In a multi-keyboard situation, where the RS-09 would usually be played with only one hand, 44 keys would certainly be sufficient for that purpose. Fill-in or background harmony would usually not require more keys either. I remember objections raised by pianists about 10 years ago when the 61-key electronic piano was introduced. These pianos have since become well accepted because 61 keys are sufficient for the job electric pianos were designed to do, and in our case 44 keys are sufficient for the job the RS-09 was designed to do. For the consumer, fewer keys can mean a lower cost (which is obviously desirable). While Roland may sacrifice keys to reduce a cost, we will never sacrifice quality for a cost reduction.

Mr Lumley mentions a number of the RS-09's features, but does so with a rather negative undertone due to his "disappointment". He

completely neglected to mention the stereo output, an important feature of this instrument. If he had been a little less negative about the RS-09, he would have presented these features for the merits that they are, instead of as faults. His statement that "there's a master volume control which lets you play very loud and can be turned down to merely deafening" suggests that he probably used the wrong output level.

The RS-09 provides a choice of three output levels as opposed to two levels (offered on previous instruments of this type). The new level is 0dBm, much higher than previously available, which permits the RS-09 to be used with ordinary hi-fi amplifiers. If he used this 0dBm output with an amplifier input designed for an instrument level (such as that produced by the RS-202), the impression he would receive from the resulting distortion would certainly explain his negative feelings. Using the higher level, distortion would be unavoidable because the volume control on most amplifiers comes after the input stage. His failure to discover such a mistake is somewhat understandable. The distortion would be in the form of clipping which, with string sounds, would be difficult to hear as distortion. The sound quality however, would be greatly affected.

An example of the negative approach Mr Lumley has taken in the review is where he states that the RS-09 "is not a true polyphonic in that it doesn't operate on the channel-assign principle". The channel-assign principle is a reasonable attempt at producing polyphony in instruments such as voltagecontrolled systhesizers which, by their very nature, are monophonic. Channel-assign systems are not truly polyphonic because they do not allow playing two separate voices which are completely independent of each other.

Such a system does not allow you to play a flute part which crosses back and forth over an oboe part, for example. True polyphony in a keyboard instrument is possible only with a split keyboard instrument or with separate

keyboards, and that's what multi-keyboard systems are all about. The RS-09 is just as polyphonic as a piano or single manual organ. It would be meaningless to apply a channel-assign system to the RS-09, just as it would be to apply such a system to the RS-202 or similar string synthesizers.

To cite one more example of Mr Lumley's negative attitude, we took advantage of a very simple circuit device to expand the flexibility of the control over the tone colour of the sound, but he presents this in a negative light by mentioning "a slider-type pot for controlling overall tone content, not terribly sophisticated as it's probably only a treble roll-off control, but no matter." The reader is left feeling that the use of such a simple device lowers the quality of the instrument. I know of several instruments selling for over \$100,000 which employ such devices. I feel that such statements by the reviewer of a product are unfair.

The RS-09 was introduced here in Japan more than a year. and a half ago and has become one of our best selling products. It is used by a number of well-known professional multi-keyboard artists and in many professional recording studios. Its success here led us to introduce it onto the foreign market and the initial response has been quite good. We continually depend on feedback from professional musicians from all over the world to help us improve our products, but Mr Lumley's reaction is so different from the reaction of most musicains that I feel certain that there must have been some misunderstanding between him and the RS-09. We would certainly appreciate it if he would take another look at

In closing, I wonder if Mr Lumley took the trouble to read the instruction manual packed with the instrument. I feel that if the RS-09 is connected to an amplifiers with the proper output level that the sound quality would be at least as good as the RS-202, or even better when using the stereo output.

Ikutaro Kakehashi, President Roland Corporation (Japan)

BUZZ MUSIC

65 Widemarsh street, Hereford. Telephone: Hereford 55961

	BRITAINS LE	BUZZ MULTITRACK ADING PROVINCIAL MULTITRACK CI	ENTRE
	Teac 2340 SX	4 channel tape deck	£600.00
	Teac A3440	4 channel tape deck	£781.00
	RX9	DBX for Teac 3440	£300.00
	Teac 144	Revolutionary new Portastudio	£520.00
		inc. free	flightcase
	Tascam 80-8	8 channel tape deck	£2099.00
	DX8	DBX for Tascam 80-8	£725.00
	Brennell Mini 8	8 track recorder + remote, varispeed	£3750.00
		and digital tape timer	
	Tascam 16 Track	Tascam 16 track with DBX & autolocate	£7500.00
	CX 210	Stereo cassette deck	£80.00
	A300	3 head cassette deck	£110.00
	A 108 Sync	Revolutionary cassette recorder with simul sync	£149.00
	Below, a selection	of the Package deals we do	
	Package 1	Teac 3440	
	-	Teac CX 210	
		Teac AX 20	
		2 x AKG D190	
		2 mic stands	
		1 pr. headphones (all leads inc.)	£868.00
	Package 5	Tascam 80-8	
		Tascam Mod. 5 mixer	
		Teac 3300 SX	
		Teac CX 210 Cassette	
		4 x AKG D190	
		2 x AKG D202	
		2 x Shure SM57	
		8 mic stands	
		4 sets headphones (all leads inc.)	£3695.65
	Package 8	Tascam 16 channel recorder	
		Tascam DBX	
l		Tascam Aunolocate	
ŀ		Tascam 16-8 mixing desk	
ĺ		ReVox B77 HS Stereo master recorder	
1		Ameron DC300A monitor amp	
		Tannoy Super Red 12"	
t		AKG 4 x C451/CK1 + power supply	
ĺ		2 x AKG D202 mics	
		2 x Shure SM57 mics	

8 prs. headphones (all leads inc.) £12,9
ALL PRICES EXCLUDE VAT BUT INCLUDE
DELIVERY (U.K./MAINLAND) £12,999.00

8 mix stands

Send for our Free Multitrack Catalogue Edition 2 for further details

BUZZ MUSIC HIRE DEPARTMENT THE LEADING PROVINCIAL STUDIO, BACKLINE & PA HIRE COMPANY

BACKLINE	Daγ	Week	Month
Messa Boogie	£12	£36	£108
Ampeg V4	£5	£15	£45
Ampeg 4 x 12	£10	£30	£90
Ampeg SVT 8 x 10	£10	£30	£90
Musicman 2 x 12	£8	£24	£72
Musicman 2 x 10	£7	£21	£63
Fender Twin Reverb	£7	£21	£63
Fender Twin (JBL)	£10	£30	£90
Zoot Horn valve Bass Amp + Graphic	£10	£30	£90
Hammond C3 + Leslie 145	£20	£60	£180
Polymoog	£30	£90	£270
Yamaha CS80	£40	£150	€450
Yamaha CP70	£40	£120	£360
Multitrack			
ReVox B77 H/S	£10	£40	£120
Teac 3440	£10	£40	£120
Tascam 80-8	£22	£88	£260
Brenell Mini 8	£35	£140	£420
Studiomaster 16-4	£15	£60	£180
Soundcraft 12-4	£25	£100	£300
Studiomaster 16-8	£25	£100	£300
Allen & Heath 16-8	€35	£140	£420
Amek 16-8	E30	£100	£300
Studiomaster 20-8 foldback	£25	£100	£300
Ancilliaries			
Eventide Harmoniser 910	£15	£45	£135
MXR Harmoniser + Display	£15	£45	£135
EMS Vocoder	£17	£51	£153
Roland RE 201/301	63	£18	£54
MXR/PACE Graphics	£5	£20	260
Ameron DC300A	£5	£20	£60
Ameron PSA-2	£10	£40	£120
BSS Crossovers	£15	093	£180
BUZZ MOBILE STUDIO (8T) (+ expenses)	£60	£319	£900
		4010	2000

All PA equipment available, from mics and monitors to foldback systems + PA Rigs, with or complete without engineers and transport, Regular deliveries to London and Home Counties and Birmingham Full list available on request ALL PRICES EXCLUDE VAT

BUZZ MUSIC - MIXERS, P.A.

RSD 12-2	£433.91
RSD 16-2	£565.22
R\$D 2P-2	£694.78
STUDIOMASTER 12-2b	£557.37
STUDIOMASTER 16-2b	€707.25
STUDIOMASTER 20-2b	£857.25
AMÉK 16-2	£1050.00
SOUNDCRAFT 16-2	£1925.00
SOUNDCRAFT 20-2	£2310.00
PALLI TITO A	S.K

	MULTITRACK	
STUDIOMASTER 16-4		£868.09
STUDIOMASTER 20-4		£1038.75
STUDIOMASTER 24-4		£1192.50
STUDIOMASTER 16-8		£1739.00
ALLEN & HEATH 16-8		£2499.00
ALLEN & HEATH 24-8		£3300.00
TEAC Model 2A (6-4)		£150.00
TEAC Model 3 (6-4)		£500.00
TEAC Model 5 (8-4)		£868.09
MM 16-4		£499.00
MM 16-8		£975.00
ACES 12-4-2		£480.00
ACES 20-8-2		£1150.00

PA OR MULTITRACK

AMEK TAC 16-8-2	£2700.00
M&A 24-4-2	£1800.00
SOUNDCRAFT 26-4-2 Series 400	£3950.00
Components and ancilliaries in stock by:	
RSD, STUDIOMASTER, AMEK, AMCRON, BSS, MM,	JBL, ATC,
ELECTRO-VOICE, AKG, SHURE, SOUND ENCLOSURES	, MUSIC WORKS
ASS, BELDEN, SWITCHCRAFT, ROLAND, EVENTIDE, M	XR, TURNER.

SPECIAL OFFER: BUZZ MUGS £2.00 incl. p.&p. PRICES EXCLUDE VAT but include carriage

BUZZ MUSIC PROFESSIONAL SALES

Buzz Music Professional Sales division exists to service the needs of professional recording studios, hire companies, broadcast and production studios, management companies, and the professional in the music industry in general.

POWER AMPLIFIERS

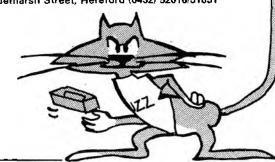
Amoron D75	£260.00
Ameron D150A	£390.00
Ameron DC300A	£595.00
Ameron PSA-2	£895.00
SOUND ENCLOSURES 12 unit flight case rack	£108.00
BSS	
Europes leading electronic crossover system	
Modular Format	
3-way with limiters Mid/High	£595.00
3-way/limiters and Led ladders	£760.00
4-way + limiters	£726.00
4-way + limiting + Led ladders	£946.00
BSS Stage/Studio Active D.I. Box	£59.00
Phantom powering module	£15.00
BSS Leads Tester	£20.00

TABINON

TANNOY	
Super Red Professional Monitors (Per pair)	
10"	£400.00
12"	£500.00
12"	£620.00
15"	£1200.00
K3808 chasis (each)	£300.00
Full details and professional price list available on request.	
All items available ex-stock	
Prices exclude VAT but include postage and packing	

NEW - AVAILABLE FREE ON REQUEST -Multitrack Studio Catalogue No. 2

65 Widemarsh Street, Hereford (0432) 52016/51831



BUZZ

Book launch

A few weeks ago Stephen Delft was invited to the Early Music. Centre near Holland Park tube station in London, to celebrate the publication of a new book on musical instruments jointly authored by Susanne and Samuel Palmer.

The title is "The Hurdy-Gurdy", which did not come entirely as a surprise to Stephen, as he says "I have known Sam Palmer and his interest in Hurdy-Gurdies for some years, and I had heard that a book was in preparation. The important point is that untill now, there was very little information available on the history, construction and playing of this unusual instrument. The Palmers' book fills an important gap and is likely, in the future, to become the standard reference book on this subject."

Several examples of old and modern Hurdy-Gurdies were on display, together with partly assembled instruments and working drawings. During the afternoon, the small yard behind the Early Music Centre was packed with friends and visitors enjoying the musical entertainment from members of the group "Blowzabella", who played Balkan and early European music on bagpipes, drums, melodeon, bouzouki, guitar and flute.

For those who wanted more





detailed information on history, construction or performance techniques, Samuel Palmer and Susanne Palmer presented lectures and seminars on the instrument, in the main teaching room of the Centre.

A most enjoyable afternoon, with generous supplies of wine, mugs of tea, good music and warm sunshine. We wish the authors and the publishers every success with the book published by David and Charles: 250 pages, including playing and maintenance techniques: £15.00 net in UK.

Radio Folk

It's good to see local radio stations playing an increasing role in supporting live music. London's Capital Radio are going ahead with the second Capital Jazz Festival at Ally Pally, and now the BBC's Radio Sheffield are helping to promote the three-day South

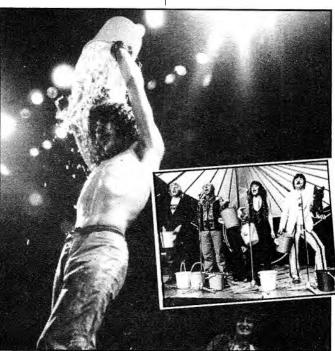
Yorkshire Folk Festival.

Topping the bill will be frish singer and harp player Mary O'Hara, Mike Harding, and Richard and Linda Thompson. Other acts appearing at Sheffield's Crucible Theatre include Martin Simpson, as well as a selection of South Yorkshire talent such as Tony Captstick, Dave Burland, Steve Womack, John Leonard and John Squire, and John Chiswick.

BBC Radio Sheffield are coorganising the event with the Crucible Theatre, with support from South Yorkshire County Council. It takes place on July 18, 19 and 20.

Stolen combo

An Acoustic 125 2×12 combo was stolen from a car outside 68, Hawthorn Terrace, East Kilbride in May. The serial number is 5921B. If you see or hear of this combo knocking around, contact D. Hamill at the above address.



Tis' gone

What will become of Saturday mornings without Tiswas? Lucky viewers in the regions where Tiwas, the epic madcap serial for kids, was shown could thrill not only to the sight of Sally James in tight leather shirts, but also to some of the most entertaining and varied rock videos and appearances by some of the notable names around:

Programmes featured Joe Jackson, Pretenders, Genesis, Tourists, Herbie Flowers from Sky, Rick Parfitt of Quo and who can forget the sight of Cozy Powell beind outdrummed by a diminutive drummer, all of nine years old!

Ah well. Back to Superman and Chopper Squad. Devoted fans may be interested in our scoop photograph of Mick Jagger rehearsing his "Bucket of Water Song" number for the next Stones album.



Rodford Rocks St Albans

As if touring the world with the Kinks and writing for IM&RW wasn't enough, bass ace Jim Rodford has managed to find time to promote a regular music venue in his home town of St Albans.

Based at the Adelaide Wine House in Adelaide Street, Jim runs two music nights there on Tuesdays and Thursdays. Tuesday is devoted to R&B and blues, while Thursdays are reserved for straight jazz of the more traditional variety.

Jim is aiming to create interest in the St Albans music scene, so he mixes well known "names" with local bands. Recent faces have included Bob Henrit, Mike Cotton and Rod Argent while the jazz night has attracted members of both Acker Bilk's and Terry Lightfoot's bands.

Admission is just £1 and the club stays open until about 2a.m., real ale is also served. So why not help Jim to Keep Music Live by popping down there (you may even catch the guv'nor testing some gear for IM&RW).

State Control

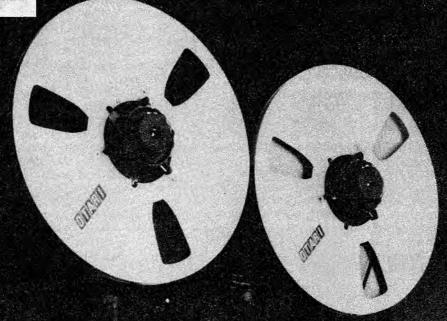
The South African government have seen fit recently to ban sales of Floyd's *The Wall* album as well as the single "Another Brick in the Wall' after several successful months at the top of the charts there

Apparently coloured school-children have been chanting "We don't need no education, we don't need no state control" during current protests and this has put the Afrikaners into a fit of paranoia. We can't wait for the Gang of Four to start touring there...



"Having witnessed the sophistication of our new 24 track Otari in Gooseberry 2, we felt confident in relying on the MX5050B for stereo mix-down. In the event, the machine was so good we purchased two more."

Peter Houghton, Owner, Gooseberry Studios 1 & 2.*



Georgian of Authorities of the protection in the protection modified domestic recorders. That little extra buys so much more.

- 1. Proper editing facilities with calibrated solicing block.
- 2. Four heads provide 2 or 4 track replay.
- or 4 track replay.

 3. Bias and EO adjustable from front panel.

4. Sevichanie NAS and ter on

5. XLR Connectors.

6. +28 dBm 600 ohm balanced output.

7. Direct drive capstan

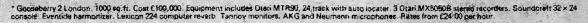
servo with varispeed. 8. Variable or preset output level.

9. 70 dB (weighted) signal/goise ratio.

10. Sel sync on each channel.

OTARI

Industrial Tape Applications, 1-7 Harewood Avenue, Marylebone Road, London NW1. Tel: 01-724 2497. Telex: 21879.



TRADE NEWS

Changes at Rosetti

Alby Paynter, the new Managing Director of Rosetti has announced the appointment, from within the company, of the following: Asst. Sales Managers — Trevor Newman, responsible for all Space Advertising and Mighty Mite; Jim Porter, with special responsibility for the Rosetti catalogue, and Ken Hinton in charge of all internal working of the sales office and warehouse, a specialist in drums and more stock knowledge than anyone!

Shipping Department Manageress is Phyllis Brock, formerly PA to Alby Paynter. All have been with Rosetti for many years and Alby commented, "With their enthusiasm and Rosetti's well-known service, we can forge even stronger links with our customers".



Simon Chapman

New Appointment for Zildjian

Eddie Haynes is pleased to announce the appointment of Simon Chapman, as his new Promotions Assistant for the Zildjian Export market.

Simon has already spent four years playing drums, in jazz and rock music and has previously specialised in selling hi-fi and stereo equipment. He left college at 18 having studied A level, Mathematics, Biology and Chemistry.

Simon's initial duties with Zildjian will include drummer and dealer liaison and other promotional work. He will be working from the office of Cymbals and Percussion (UK) Ltd, 68 Swithland Lane, Rothley, Leicester. Tel: (0533) 303184, (0533) 303290.

Stentor's Touch Wood

During the last decade there has been a great increase in the number of professional luthiers and specialist repair workshops in Britain. Stentor's range of tonewoods and tools has expanded to meet this demand currently taking up nine columns of the general price list. There are, however, a few makers who are also retailers and only two general music shops who stock a range of tonewoods for the amateur maker.

A new company with the appropriate name of Touchstone Tonewoods Limited, managed by Dave Carroll, has therefore been set up to take over Stentor's tonewood supplies. It will operate from shop premises in Lesbourne Road, Reigate, serving all makers and repairers. The shop will not sell any instruments or accessories and all such enquiries will be referred to Stentor's retail customers.

Although tonewoods will disappear from the Stentor catalogue, all supplies needed for retail servicing departments will be an important part of the new Stentor Main Catalogue, which is now nearing completion.

For the uninitiated, "tonewoods" covers all timbers such as spruce, pine, maple, rosewood, ebony, mahogany etc., which is specially sawn, seasoned and selected for its tonal qualities and suitability for musical instruments. Other supplies include glues, mother-of-pearl, abalone, fretwire, rosettes, bridges, varnishes, purfling, soundposts and many special tools for violin and guitar makers.

Datanomics and EMS

Datanomics Ltd of Westminster Road, Wareham, Dorset have recently acquired the sole manufacturing rights to all EMS (Manufacturing) Ltd and EMS (London) Ltd equipment.

Manufacture has already commenced in the new premises, under the direction of Alex Miller, who was a member of the original EMS team. The full EMS range of synthesizers is being continued, with particular emphasis on the AKS, Vocoder

and Polysynthi, as well as the educational models.

The research and development is continuing and involves the use of the latest micro-chip and computer-aided technology. Distribution of the equipment is generally being handled by Mick Johnson Music, 227 Putney Bridge Road, London SW15.

Datanomics Ltd are presently developing other items of on-stage equipment, including five performance mixers and sophisticated output PA systems, and are also able to supply this, and EMS equipment, on rental terms. All rental, repair and spares enquiries should be directed to the factory (Tel: Wareham (09295) 6311).



Saxon Using Hohner EFX

Lead guitarist Graham Oliver of the fast rising Heavy Metal band, Saxon, recently took delivery of a complete set of Hohner HFX effect units from Sheffield dealers, Musical Sounds.

He will be using them on stage and in the studio proving that the heavy metal construction of the units is just right for the Heavy Metal music revival his band are currently heading.

Ludwig: To UK Dealer For 1979

Rose Morris recently presented Gig Sounds of Streatham with the Ludwig "Dealer of the Year" award. Eric Lindsay, manager of Gig Sounds, and his salesman, John Blunt, won the award for their outstanding sales back up service of Ludwig drum outfits during 1979.

Both salesmen have been in the music business for many years. Eric was a professional guitarist for seven years, moving on to a very successful career in the retail side of business. John has been playing Ludwig drums for over 12 years — his career has included a spell as drummer with the Searchers. Eric was presented with his prize — a Korg Guitar Synth (at his request) — by Ed Able, Vice-President Manufacturing, of Ludwig. He also enjoyed a night at Ronnie Scott's in the company of Roy Forder, Sales Manager of Rose Morris.

Two Audio/Video Synchronisers for LWT

London Weekend Television Ltd, has recently placed an order for two SMPTE/EBU Q-lock 210 audio/video synchronisers from 3M. This machine is exceptional in that it is capable of interfacing with virtually any professional audio/video recorder. Other noticeable features includes 10 auto-locate memory positions for master and/or slave, and a self-contained time code generator (any standard).

The synchroniser requires no modifications to either audio or video recorders used for master or slave machines.

Further information can be obtained from 3MK UK Ltd on Bracknell (0344) 58445 (John Prigmore).

Silver-Eagle Goes World-Wide

Following their attendance at the International Music Trade Fair in Frankfurt, Silver-Eagle designs have carried out the most successful appointment of new distributors in the company's history.

The company manufactures and markets the Tres Amigos wood care products, Doctor Song Leather-Like Guitar Straps and the widely-known "Pick-Pocket" Genuine Leather & Fabric Instrument Straps and Accessories, Their complete catalogue of products will be exclusively represented throughout the UK, Scotland and Ireland by Rosetti (EMI) Ltd of London.

Other countires where distribution has been established include Japan, France, Germany, Argentina, Italy, Finland, Norway and the Benelux Countries.

Fender Competition

Would readers please note that the closing date for the Fender Competition which ran in the March, April and May issues of IM&RW, is July 14.

ALBUMS

Mc. Cartney

McCartney II Parlophone

This album more or less follows on in the same vein as McCartney's first two solo ventures in the early Seventies. It is a solo album in every sense of the word, for the man sings, plays and writes everything. In fact he has even dispensed with a studio and has recorded everything at home by simply plugging the mikes directly into a 16-track Studer.



As with McCartney I and Ram the tracks are a complete mixture of various musical styles, there are straight rockers, love songs and various bits of whimsical indulgence. And once again, as with those early albums, the results are somewhat patchy.

The opening track "Coming Up" will always conjure up memories of that fantastic video which accompanied it on Top of the Pops and various other shows. Other typical McCartney pop comes in the shape of "Temporary Secretary" and "One of These Days".

As if to emphasis the basic nature of the recording situation, a couple of excellent rockers are included. "On The Way" contains Neolithic drums and bass compete with echoey vocals and wailing guitar. With Lennon-type vocals it sounds like a jam from an early Beatles session.

The one thing McCartney excels at is plaintive ballads. You will not find a better example then "Waterfalls" which finds him at his most plaintive accompanied only by electric

piano and acoustic guitar.

The album also includes a couple of instruments, one of which, "Frozen Jap", is my favourite cut. Once again McCartney uses basic instrumentation, getting an oriental flavour from his synth backed up by metronomic drums.

Overall not a great album, I can do without tracks like "Temporary Secretary" and "Bogey Music", but nevertheless an interesting one.

David Lawrenson

Engineered and composed by Paul McCartney. Technical assistance, Eddie Klein

Billy Cobham

Best Of...Billy Cobham, (CBS) Return To Forever (CBS), Mahavishnu Orchestra (CBS)

The Cobham and Return To Forever albums should be retitled "The Worst Of . . . ". All of Cobham's best work was with the Mahavishnu Orchestra, when he was playing with musicians of the same high calibre and under the discipline of John Mc-Laughlin. Outside of this context Cobham has proved that he certainly ain't no leader and he ain't got much taste either. His "Best Of" album consists of mediocre disco and cliched fusion. Yawn.

Unfortunately for CBS the real "Best Of RTF" is on other labels, namely ECM and Polydor. The crystalline first album on ECM and "Light As A Feather" by the initial incarnation of RTF (Joe Farrell on soprano and flute, Flora Purim, vocals, Airto Moreira on drums, Stanley Clarke on acoustic bass, and of course Chick Corea on electric piano) still stand as masterpieces. The best albums produced by the



post-Mahavishnu rock orientated RTF, "Hymn of the Seventh Galaxy" and "Where Have I Known You Before?", are not represented here. The music CBS have been left with is superficial and showy, jazzrock for your parents to tap their toes to.

And now for some real music. The Mahavishnu Orchestra kept the 'inner mounting flame" alive in the otherwise boring mid-Seventies, an almost unbearably intense band that astonished a whole generation of musicians. The trouble with this compilation is that the band has left behind such a rich legacy that inevitably many deserving tracks are left out. The cuts here are fairly representative (e.g., "Birds of Fire", "Meeting of the Spirits", "Lila's Dance"), except there is nothing from the final album, ' 'Inner Worlds", a major omission.

Another problem with an album like this is that each of the original albums had a flavour and atmosphere of its own, which is destroyed by picking out odd tracks here and there. Do yourself a favour and go and buy the original records.

Incidentally, CBS, the track listed on both album and sleeve as "Be Happy" is in fact "Earth Ship". Wake up.

Lynden Barber

Graham Parker

The Best of Graham Parker and the Rumour (Vertigo)

There's one good thing about artists changing labels, and that is the usual compilation album from the outgoing record company. Now I know that most fans will have the tracks already, nevertheless many "Greatest Hits" or "Best of..." collections have a habit of excluding vital material.

I am happy to report that this Graham Parker compilation is not one. Everything you expect is here from the definitive Parker of "Soul Shoes" to the classic "Hold Back The Night". It is worth the money for these two and "White Honey", "Hotel Chambermaid" and "Hey Lord Don't Ask Me Questions" on

their own, but there are 10 other tracks as well.

David Lawrenson

The Cure

Seventeen Seconds (Fiction)

This record is sad — sad because the Cure have so much potential that just hasn't been captured on record. Their first album was bleak and empty, bar a fast and furious version of Hendrix's "Foxy Lady", but on stage they sounded a different band. Robert Smith's guitar came across forcefully, a vehicle which showed his songs to best advantage.

Instead of trying to capture their live sound on vinyl they have opted for carrying the paring down process even further on their second album.

The result is a record that is as cold as a dead dog, and which sounds like it was recorded in a laboratory rather than a recording studio. It's an attempt at a "mood" album, but with a couple of exceptions the only mood induced is boredom. I have a suspicion that drummer Lol Tolhurst is really a drum machine — he doesn't deviate from a strict beat throughout.

The high points are "A Forest", also released as a single, with its softly meanacing undercurrent, and "At Night", based around a doorny bass riff, subtle use of synth and a Joy Division drum sound.

Lynden Barber

Produced by Robert Smith and Mike Hedges, assisted by Chris Parry and MLS. Engineered by Mike Hedges and Mike Dutton, assisted by Nigel Green and Andrew Warwick. Recorded at Morgan Studio One

BrandX

Do They Hurt (Charisma)

Despite some loony rambiings on the sleeve notes by Michael Palin and a first track title of "Noddy Goes to Sweden" Brand X have pro-

duced another fine album that should be considered serious-

The line-up varies between various combinations of Jones, Goodsall, Robinson. Lumley, Clarke, Giblin, and Phil Collins successfully intermeshing on a more digestible offering than we have come to expect. My choice cuts - "Cambodia" (no prizes for guessing who was a major quitar influence on John Goodsall) and "D.M.Z.", a Percy Jones composition.

Mr Jones excells with his amazing virtuoso style of bass playing on this album demonstrating to all and sundry how to play jazz bass in a decisive manner that defies his casual stance.

I have never understood why Brand X can't realise greater popularity in their native UK than in the States but my soul is satisfied by the fact that the colonials are getting a good education. Let's wean them off a diet of FM Radio-Brek onto a strict diet of one of the best iazz-rock bands in the world.

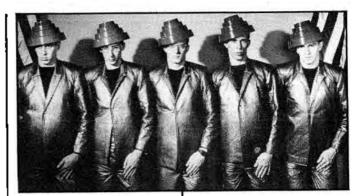
Mike Feasev

friends in celestial white suits a-la-Bee Gees and on the back cover Stanley Mouse displays what must be his most restrained illustration ever in the Mouse & Kelly era of popular memory

Inside, Messrs Garcia et al have woven a rather formulated contribution in their now, some would say, almost sentimental studio mode.

Side two is preferable to my tastes and harbours an underlying Feat-meets-Steely Dan style in "Easy to Love You". The writing combination of Weir and Barlow works best on "Lost Sailor" and "Saint of Circumstance" but the overall "feel" of the album is weary and lacks bite and the emotive ambience that makes a reasonably pleasant collection of songs into a memorable one in today's saturated market. If only Lowell were alive...One for Dead Heads and students of mass acceptability, OK, lads, back to your sarcophagi!

Mike Feasev



two?), "Gates of Steel", and the title track with its thundering tom-toms, which is a bit of a classic. The rest is instantly forgettable, bar a few pleasant synth noises here and there. And now for this month's pop poser: when will Devo be joinina Yes?

Lynden Barber Produced by Devo and Robert Margouleff, engineered by Robert Margouleff and Howard Siegal, assistant engineer Karat Faye. Recorded at the Record Plant, Los Angeles The long tracks "Processional" and "Oasis" on sides two and three stand comparison with the best of Jarrett's recorded work. In structure they have more in common with his solo piano work than previous group records, being based around his improvisations rather than compositions. He makes great play of his trademark of simple, hammered out ostinato figures in the left hand that act as a backdrop for improvisation in his right hand and, in this case, Garbarek's saxophone. In one remarkable section Jarrett builds up a raga-like pattern against Christensen's demonic crash cymbal work and Garbarek's nasal Baghdad markettoned soprano. The whole atmosphere of these sides is oriental, with "Oasis" building up into a Terry Riley-like trance towards the end.

There is another good reason for braving the album's dross - the beautiful, relaxed

engineered by Tom McKenney Martin Wieland

Leith Jarrett

Nude Ants (ECM)

Like many double albums, this would work far better as a single album. Recorded live at the Village Vanguard in New York with Jarrett's European group, it can be divided into 'eastern" and "western" musical zones. In short, the "western" pieces suck, and the "eastern" sections show why Jarrett has built up a towering reputation as one of contemporary music's leading improvisers.

To start with the bad, side one's "Chant of the Soil" is a lazy, wooden attempt at funk. Drummer Jon Christensen and bassist Palle Danielsson are just not capable of this kind of material, and Jan Garbarek's cold soprano tone is totally unsuitable. The track, which steers dangerously close to fusion muzack, would be too long at five minutes, let alone its actual playing time of 17 minutes. Side four is the other hard crust that surrounds a sandwich of goodies. "New Dance" is a sort of half-baked Latin American-a-go-go, like Edmundo Ros on downers.

"Innocence" at the end of side one. It serves as a reminder that Jarrett is capable of being an inspired composer as well as an effortlessly creative improviser. Lynden Barber

Recorded live at the Village Vanguard, NY, May '79 Produced by Manfred Eicher, and mixing engineer

Jack de Johnette

This record represents some of the healthiest currents in contemporary jazz - namely a free spirit combined with a deep respect for the music's traditions. De Johnette is the continued page 36

Grateful Dead

Go to Heaven (Arista)

What? Still alive? Aren't they the crazy guys who did the Cheops gig? Yes, 'fraid so kids. This strangely overproduced Dead, far removed from the country acid rock of my memory is a distinctly different band of pranksters who produced my favourite album Mars Hotel. (So memorable for "relaxing at home" with, as we say in the office.) The front cover sports our laid-back

)evo

Freedom of Choice (Virgin)

New wave smartass pop. Actually, not so smartass. Is this really the same group that made your brain feel it was being sliced in two on "Satisfaction"? Can men who pose on album sleeves in plastic flowerpot hats be serious? Why am 1 listening to this boring son-of-Buggles plastic pop?

Actually there are a few worthwhile tracks, notably "Girl U Want" ("My Sharona" part



IPS SERIES 8000 PROFESSIONAL POWER AMPLIFIERS



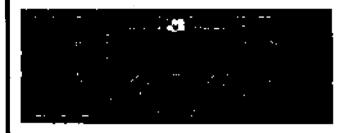
MODEL 1002

 $100w + 100w 4\Omega$ £260.00 + VAT



MODEL 2002

200w + 200w 4a£325.00 + VAT



MODEL 3002

 $300w + 300w 4\Omega$ £450.00 + VAT

FEATURES:

19" Rack Mounting — XLR Output Connectors — Switchable Fan Cooling — LED Output Displays — 2 Totally Separate Power Supplies — Thermal Protection (90 second recovery time) — Electronic Protection — 5-year Guarantee.

OTHER PRODUCTS include:

5002 500w + 500w 2

8000 3-way stereo electronic crossover

8006 6-input stereo disc &

Tape Mixer

£576.00 + VAT £149.50 + VAT

£370.00 + VAT

DISTRIBUTORS:

REW Audio Visual. 114 Charing Cross Road, London, WC2. Tel: (01) 836 2372

Gloster Music Centre, 9 Market Parade, Gloucester. Tel: (0452) 33084

Severnside Audio & L ghting, Building 2, Portwall Lane, Redcliffe, Bristol. Tel: (0272) 23164

Atmosphere Lighting & Sound, 64 The Green, Aberdeen, Scotland. Tel: (0224) 572905

JPS ASSOCIATES

Belmont House, Steele Road Park Royal, NW107AR

Tel: (01) 961 1274



Craftsmen to the world's musicians since 1887.

YAMAHA PRO CENTERS

Yamaha professional instruments are only available from the following Yamaha PRO CENTERS who are selected for their expertise and standards of service. When you buy from a PRO CENTER you get the benefits of Yamaha service and a 3 year guarantee.

South West and Midlands

Abbay Music Centre
4/6 Market Place, Burlon-on-Trent,
Statfordshire — 0283 68404.
Coventry Music Centre
3/5 Whitefrars Street, Coventry,
West Midlands — 0203 58571.

Everymans Music 209 North Street, Bedminster, Bristol — 0272 661445

Bristol — 0272 661445
Bill Greenhalgh
125/127 Fore Street, Exeter.
Devon — 0392 58487
Eddie King Music Ltd.
147a Sl. Michaels Hill, Bristol
BS2 80B — 0272 36613/39887
Eddie King Music
51 Cowbridge Road East, Cardiff.
Kingfisher Music
20 Kings Road, Fleet,
Hants. — 0251 421210
Modern Music
30 Castle Hill, Dudley,
Worcestershire — 0384 55293
Eddle Moors Ltd.

Wordestersing — 0004 2220 Eddle Moors Ltd. 679 Christchurch Road, Boscombe, Bournemouth, Hants — 0202 35135

See and Dee Music 25 Blackwell Street, Kidderminster, Worcester — 0562 60995

Western Organs
7 St. Owen Street, Hereford HR1 2JB.
— 0432 50277

— 0432 50277
Whitwarms
70 High Street, Winchester,
Hants. — 0962 65253
Woodroffes
5/8a Date End,
Birmingham — 021 236 4992/3 Music Stop 106 School Street, Wolverhampton WV3 0NR — 0902 29352

South East

ABC Music 14/16 High Street, Addelstone, Weybridge, Surrey — 0932 40139 Alfens Music Shop 23/24 Broad Row, Gt. Yarmouth — 0493 2887

0493 2867 Andertons 5 Stoke Fields, Guildford, Surrey — 0483 38212 Andertons Modern Music 899 Oxford Road, Reading, Berkshire — 0734 415800

Axe Music 16 Mersea Road, Colchester, Essex — 0206 65652 Cambridge Rock 44 Newham Road, Cambridge — 0223 65093

0223 65093
Chase Muelcians
22 Chalton Street, Off Euston Road.
London N.W.1 — 01-397 7449
London Synthesizer Centre
60 Oldham Street, Manchester —
061 229 2865
Croydon Music Studios Ltd.
40 Station Road, Croydon, Surrey
CR0 28B — 01 688 0628

Freedmans 629-631 High Road, Leytonstone E.11 — 01-539 0288.

— 01-539 0268.
Gigsounds Ltd.
85 Mitcham Road, Streatham,
London S.W.16 — 01-769 5681
Howky Tonk Music
300/302 London Road, Hadleigh,
Essex — 0702 553647

John King 8 Richmond Road, Kingston-upon-Thames, Surrey ---01-546 9100

Live Music & Piano Centre 28 Fitzwilliam Street, Peterborough — 0733 67168

Soundwave 86 Victoria Street, Romford, Essex — 0708 25919 Essex — 0/08 25919

Sound Gear

10 Southlown Road (percussion only),
Gt. Yarmouth, Norfolk — 0493 3746

South Eastern Ents. Agency
373/377 Lewisham High St., Lewisham,
London S.E.13 — 01-690 2205

London S.E.13 — 01-990 2205 Tempo Music 160 The Broadway, West Ealing, Middlesex — 01-567 0212 Wing Music 15/15a London Road, Bromley, Kent — 01-460 9080

Rose Morris 81 Shaftesbury Avenue, London W.1 — 01-437 2211 R.M.S. Eddie King 5 Langley Street, Covent Garden, London — 01-379 7022

North

A.1. Music 88a Oxford Street, Manchester — 06f 236 0340 E. D. Brown 55 Darwin Street, Blackburn, Lancs. — 0254 54681 Lancs. — E. D. Brown 141/143 Leeds Road, Nelson, 1 ancs. — 0282 65967 14/7/43 Leeds Road, Nelson, Lancs. — 026 65967 Carlsbro Sound Centre 183/184 Chesterfield Road North, Mansfield, Notts. — 0623 26976/26199 Carlsbro Sound Centre 13 Berkeley Road, Ecclesall Road, Sheffield, Yorks. — 0742 663862 Frank Hessey 62 Stantey Street, Liverpool — 051 236 1418 Johns Music 142 High Street, Scunthorpe. Lincs. — 0724 843800 Kitchens Ltd.

Lincs, — 0724 443900 Kitchens Ltd. 27/31 Queen Victoria Street, Leeds, Yorks. — 0532 446341 Musical Sounds 274 London Road, Sheffield — 0742 50445/54381

E. D. Brown Cooks Buildings, Abbey Road, Barrow-in-Furness — 0229 30346

E. D. Brown 51/52 Friargate, Preston, Lanca. — 0772 50132 Newtone Music 64 Market Street, Earlestown, Newtone-le-Willows, Cheshire — 09252 22514

Chesnife — US/32 22514
Northern Sounds
41 Jane Street, Workington,
Cumbria — 0900 4797
Power Music
134 Derby Street, Bolton,

Professional Music Services 4 Freeman Street, Grimsby — 0472 44304

0472 44304
Rock Chy
10 Mosley Street,
Newcastle-upon-Tyne — 0632 24175
Rock Island
10 Waterloo Street, Oldham,
Lancs. — 061 820 5011
Sound Pad Music Centre
64 London Road, Leicester —
0533 20760

Stephens Musical Instruments 70 Newbrigate, Leeds, Yorkshire — 0532 34710

Yorkshire — 0532 34710 Whitesound 3 Albion Place, Sunderland, Tyne & Wear — 0783 78058 G. A. Williams Blackwellgate, Darlington, Co, Durham — 0325 60454 Wisher (Derby) Ltd. 77/79 Osmaston Road, Derby — 0332 46156

<u>Scotland</u>

Bradleys 69a West Regent Street, Glasgow — 041 332 1830 Round Sounds 177 Main Street, Wishaw, Scotland.

177 Main Street, Wishaw, S Grant Music 53 Home Street, Edinburgh EJ3 9JP — 031 228 1704 McCormacks 33 Bath Street, Glasgow — 041 332 8644

u41 332 5544
Magnum Sound
67 Stewarton Street, Wishaw, Scotland
— Wishaw 78761
Gordon Simpson
6 Stafford Street, Edinburgh SH3 7AY.
— 031 225 6305

Viking Vision 169 Commercial Street, Lerwick — 0595 3423 Strings Music 164 St. Clair Street, Kirkcaldy — 0592 52801



continued from page 33 perfect leader, his understated drumming coaxing and suggesting rather than coercing soloists David Murray and Arthur Blythe, both of whose playing here is often hairraising.

The ghost of Eric Dolphy is to be found lurking in the grooves, thanks to Blythe and Murray, whose serpentine alto and bass clarinet twist and turn in typical Dolphyesque fashion. One track is in fact called "One For Eric" and the group also performs Coltrane's "India", which Dolphy has performed on.

The long track "Zoot Suite" (dedicated to Zoot Sims?) features a swinging theme

reminiscent of Dizzy Gillespie's "Blue 'n' Boogie' and simple reflective passages that include some melodic bowed cello from Peter Warren, otherwise to be heard on bass.

This is a highly emotional album. Who said ECM were a coffee table label?

Lynden Barber

Blondie-Gary Newman

Eat To The Beat Blondie Gary Numan

It's disturbing to see so little creativity injected into what could be a rich and fruitful combination - Blondle and the video medium. I don't know about you, but I've always regarded Blondie as one of the more intellectual outfits extant in the rock world today, so it was dissapointing to see that the Eat To The Beat Video Show is just like a string of Top Of The Pops clips tacked together. The target that should be aimed for by video producers is rather the best of The Old Grey Whistle Test what springs to mind is the highly impressive "Accidents Will Happen" animation by Elvis Costello.

Eat To The Beat features the band in every clip, and therefore becomes just a little dull, and that's only on first viewing. I'd hate to be faced with the prospect of having to watch the tape once a week merely to justify a £30 investment. A little experimentation by Jon Roseman, the producer, wouldn't have gone amiss, but we must bear in mind the fact that marketing men may have wielded their influence and insisted on tameness in order to satisy the international gloop market.

Aside from this criticism, the tape is expertly put together with nary a join showing and the production company has resisted the temptation to sling one effect after another at the viewer.

Unlike the Gary Numan video, in which the watcher is constantly kept disoriented with tricks attained through the use of the Squeezeflex device. Perhaps this is to take attention away from the music. At first Numan's pleasant voice isn't so bad, and the Cars clip is exceedingly flash and entertaining. But during the rest of the tape, which features highlights of his Hammersmith gig last September, it becomes depressingly clear that Numan's vocal range, musical vision and musicianship is painfully limited.

Derek Burbridge of Zoetrope is responsible for making the



U.K. Distributors: Strings & Things Ltd. Unit 2, Chapel Road, Portslade, Brighton BN4 1PF, Telephone Brighton (STD 0273)412554.

Distributed internationally by: E and E Instruments International, 23011 Moulton Pkwy., F7, Laguna Hills, CA 92653, U.S.A., Telex 182-291

Carlo Carlo

film a delight to behold — it looks as if he's taken every artifice possible and stirred it into the final mix, to great effect. A man after my own heart. It's a pity Numan's talent doesn't rise to the occasion. Though to be fair, he can create a kind of post-apocalyptic future zone wierd-out ambience, if you happen to be in the right mood.

The Numan tape is already on sale — VHS and Betamax cassettes costing £19.99 with U-matic and Phillips retailing at £29.99. Mail order only from Beggar's Banquet, 8 Hogarth Road, London, SW5.

For undisclosed reasons the Blondie tape has yet to be released, through it was due out in Spring. The video has been made by Chrysalis in conjunction with Alive Video Ltd, and will be available on the Sony systems and Betamax only. Late August should see the tape commercially available, at a special price of £19.99 due to sponsorship by Sony for the first three months. After this period the price will rise to £29.99.

Start saving now, kids.

Stephen Brennan



JIR-LIGHT-PHES.BRUNZE

U.K. Distributors Summerfield, Gateshead NE8 3AJ

These top drummers chose to play Pearl

Brad of the Specials, H of Selecter and Jane of The Bodysnatchers all chose Pearl and bought their own kits.

Like all the leading names who play Pearl, they're not given any incentives to use or endorse the products.

They play Pearl because they want to.



Attract attention with Pearl

Pearl Music Ltd., 29-35 North Acton Rd. Park Royal, London NW10, Tel: C1-961 6644.

IT'S A MAXWIN DECADE



London NW10. Tel: 01-961 and Circle 824 on Reader Service Card

That's why it's going to be a Pearl and Maxwin decade.



Silence. The Step Beyond.

Even more important than what an effect adds to your performance is what it doesn't add. Noise—pops, clicks, and hiss can make a good effect virtually unusable in a performance. That's where BOSS effects are different, and it's a difference you'll notice from the moment you turn them on.

You see, all the different effects on the market share the same noisy problem—they all use the same kind of mechanical footswitch, and no matter who makes it, it still has the same problem—it makes an audible "click." That can be a pain in the studio where you have live mikes, but even worse is that a mechanical switch is prone to make popping noises in the signal when it's engaged, and that's a real problem no matter where you are.

BOSS effects have been designed differently. We incorporate what is called E.E.T. switching. This means that there are no mechanical contacts in the signal system, so it won't make an audible click—and it can't make a pop. The switching is done totally electronically and cleanly.

But that's only the beginning of the beauty of BOSS pedals. You'll find a host of other features the competition has yet to catch up with. Features like battery eliminator jacks on every pedal, skid pads that work, and a unique design that allows you to change the battery without exposing the circuit board. And, back on the subject of silence, you'll find BOSS pedals to be the quietest pedals on the market with signal to noise ratio consistently better than 80 dB.

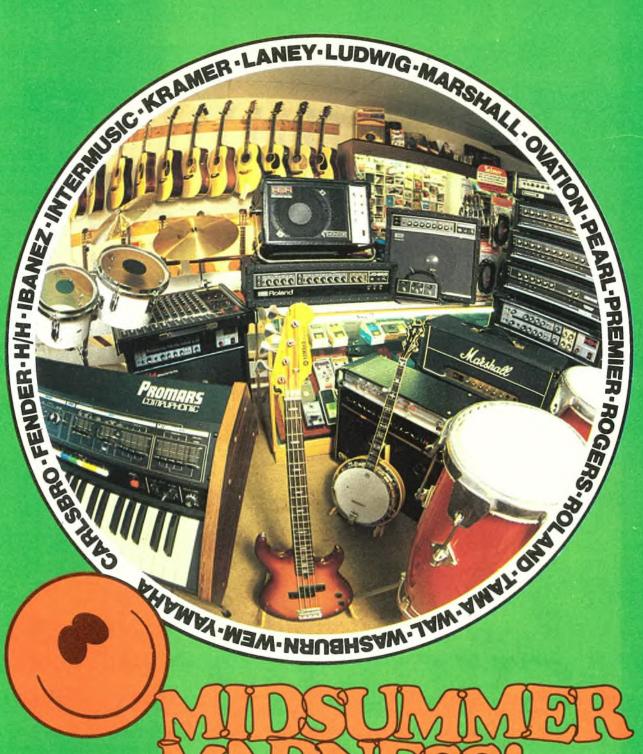
You'll find a BOSS pedal to fit any need—from phasers to flangers, to equalizers to compressors to the new CE-2 Chorus Ensemble, a compact version of our legendary CE-1.

None of the BOSS pedals make noise. No clicks, no pops, no hiss. And that's pretty important. Cause if you're serious about your music you know that what you leave out is as important as what you put in.

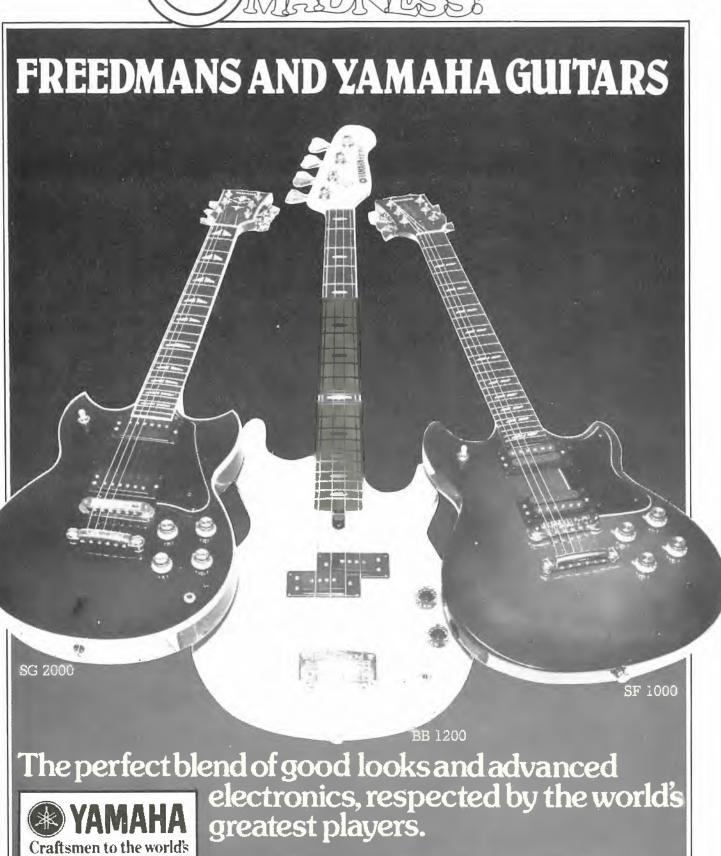
Brodr Jorgensen (UK) Ltd., 983 Great West Road, Brentford, Middlesex TW8 9DN.

Tel: 01-568 4578 Telex: 934470.









Also at FREEDMANS—the YAMAHA range of quality acoustics.



627-631 HIGH RD, LEYTONSTONE, LONDON E11. 01-539 0288



Freedmans 'Music Superstore' is really five separate every way. We'd like you to ask yourself what you want

A full range of instruments? Ours is one of the largest in the country covering all major names and all price

We know you'll agree that Freedmans offer the best all-round deal. Repeat: the BEST!

reputation on it - we have our own one-year parts and

to bother with. Stage equipment? We keep everything

So drop in and see us. Our route map will show you no problem. Wherever you are and whatever you want, Freedmans are well placed to supply you, and once

99% of instrument and electronic repairs on the

Мяwkh&Anglia de estagais, de altri The North reconstitution of the control of the made people of Assessed in particular to the Property of Other **The West** CUSTON: O MANAGEMENT About half an hour from the West End by the Cantial Line PADDINGTON PH made man consultaneau recent (31), 140 / 14 / 2011 recht of ann an Mar Milleton Kent and the second s The South

627-631 HIGH RD. LEYTONSTONE. LONDON E11. 01-539 0288



Visit FREEDMANS for ROLAN

More than 60 different lin

GR-300 Guitar Synth

Supplied complete with craftsman-made purpose-built guitar, the GR-300 is Roland's latest guitar-synth and permits the use of all the standard lead and rhythm techniques as well as astonishingly versatile synth features. All major synthesizer functions are foot-switch controlled.

The SH-2 Synthesizer

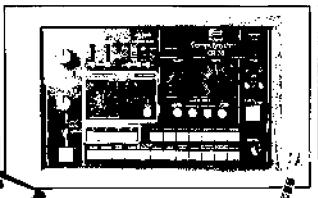
Big brother to SH-09. Everything you could want from a monophonic synthesizer at an extremely modest price.

SH-09 Synthesizer

Compact, action-packed and attractively priced. A full-specification system synth which can act as a basis for an entire electronic stage set-up. Puts synthesizer versatility within reach of the first-time buyer.

CE-2 Chorus Foot-Pedat

Your guitar, keyboard, or vocals are given the swelling sound of double or triple tracking — at the touch of a pedal. Roland invented the Chorus effect, and now it is at the disposal of more musicians than ever. 9V battery or mains powered via adapter. Rate and Depth controls.





CSQ-100 Digital Sequencer

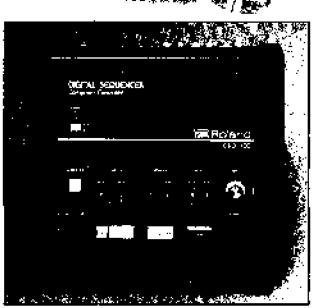
From the Microcomposer family it ties in with your synth to 'memorize' any sequence of up to 168 notes for play-back as required. Built-in metronome. Tempo. and Portamento controls. Synchronize with rhythm box such as CR-78 to pre-set entire rhythm-track compositions, no matter how complex.

CR-78 Compurhythm

The space age rhythm unit that has everything, 64 presets plus micro-computer for creating your own beats gives infinite potential. 14 different instrument voices, full range of percussion sounds, 11 'variation' controls.

DR-55 Doctor Rhythm

Fully programmable rhythm combining versatility and precision with compact size and moderate price. A new release from Roland and a significant achievement in auto rhythm.



Every item can be demonstrated on request. Or use our mail order service



627-631 HIGH RD, LEYTONSTONE, LONDON E11. 01-539 0288



D KRAMER and WASHBURN

es permanently in stock.

VK-1 Organ

Traditional pattern '60s' single manual drawbar organ with Roland solid state reliability. 9 drawbars. 3 presets plus percussion, a stage sound of ever-increasing popularity.

RE-201 Space Echo

Perhaps the most popular echo around. 12-mode operation plus variable repeat rate, intensity, and volume on the echo sound.



Jazz Chorus Guitar Amplifiers

JC amplification combines toughness and knock-out power levels with complete control. Even the smallest features volume, treble, bass, distortion, reverb, vibrato speed, and vibrato depth pots plus Bright and Chorus/Vibrato switches. The range goes from the JC-50 up to the incredible JC-200 — king of the back line.

DC-20 Analog Echo

Simple-to-operate, utterly reliable, unusually versatile, 2 channels, controls for input volume, repeat rate, echo volume, echo intensity.

Boss Pedals

Boss are established leaders in the effects pedal market. See the whole range at Freedmans.



> have equipment delivered to your door. Credit available on most products

Rack Mounted Equipment

Most items in Roland's famous rack mounted series are available at Freedmans.

Washburn Acoustics

Designed in America, constructed in their own factory in Japan. Washburn acoustics represent the peak of the guitar craftsman's achievements. They are imaginatively designed, carefully made, and each one is a great individual.

Washburn Wing Series

In the Wing series 'An age-old tradition takes flight'. They represent the application to electric guitars of more than 100 years of experience gained by the Washburn company in making quality acoustics. See the Falcon, the Hawk, and the other high flyers at Freedmans.





Kramer Gultars 🛦

The name of Kramer has come to imply precision taken to its uttermost limits. They are guitars to exceed the standards of the most demanding musician. See the DMZ-5000 bass, the DMZ-650 bass, the DMZ-1000 and the 450G at Freedmans, plus the quality range of Kramer acoustics.





Performer. A name that befits outbrilliant new range of lead instrument systems as aptly as the equipment will describe your musical style...because Pedromer is actually programmable to sound however you wish, with virtuoso

Free from restrictions and vibrant with the flexible sound of MOS-FET technology, cool running and powerful.

On the new scratchproof from panel you'll be comforted to find an illuminating and logo and the inputs for two separate channels. This arrangement offers innovative permutations between too, compression, reverband. distortion level—from tingling clear to creamy sich. And the basic price includes a remote foots witch (with LED status indicators) for logic selection between the two channels and

Should you desire still more effects, then the amazingly small 21st Century Module may be installed completely into the Performer control panel to generate phasing. ADT and exho: with no entangling leads, no exhausing batteries, no

To project this sound with the quality it deserves, HH Acoustics have designed and manufactured completely new loudspeakers, harmonically optimised for each model in the

Sample this futuristic simplicity for yourself at any HH dealer, who will gladly explain how MOS-FET reliability continues to protect your investment and can lead you to



HIH Electronic, Viking Way, Bar Hill, Cambridge CB3 8EL. Tel: Crafts Hill (0954) 81140. Telex: 817515 HH Elec G

627-631 HIGH RD, LEYTONSTONE, LONDON E11. 01-539 0288





FREEDMANS

FREEDMANS 627-631 HIGH RD, 01-539 0288

			-	LEYTO	NST	ONE, LONDO	N E11.
	KEYBOA	RD DEPT.		Yamaha SF series to stock	P.O.A. D	CLASSICS	
KONG SYNTHESIZERS		STRING SYNTHESIZERS		Cimar Strat	£ 115.00 D	B&M Sevilla	£ 44.00 D
MS 10 MS 20	£770 AA C	Solina Multiman String/piano/brass				Hertz Hondo II	£ 37.00 D
1910 DU CADALIUM	. E531.00 C	Sisme	£ 380.00 D	ACOUSTICS		Hokada	£70.00 D
SQ 10 Sequencer	£235.00 C	Pranet T	£ 225.00 D	Guild D40 Epiphane PR745	£ 334.00 D	Joanez	£ 92.00 D
M2 05 Intertace """	. £102,00 B	Eurotec Jen Pianotone	£ 245.00 D	Epiphone PR725	£ 199.00 D	Yairi Concert	£111,00 D
ROLAND SYNTHESIZERS	£285.00 ¢	Crumar Roadracer	£ 299.00 D	Washburn Grand Concert F15	.£ 54.00 D	Many other makes and models COUNTRY GEAR	N STOCK
JP 4 4 note poly	£1250.00 E	TONE CABINETS Sharma 981		Washburn D60 sw Washburn D62 sw	£189.00 p	Ibanez Artiste Banjo + case	£395.00 D
SH 09	£199.00 D	Sharma D770	£417.00 F	Washburn 0265	£ 125.00 D	Antoria Custom Banjo Epiphone Banjo + case	£296.00 D
SVC Hack Vocoder	£466.00 C	Sharma 3200 FIX RHYTHM UNITS		Washburn D25 Fonder F95	£ 232.00 D	Antoria DX75 Banjo Lorenzo Banjo	
SPC Plack P/volts synth	£392.00 C	Roland Or Rhythm programable Roland CR 68	£ 89.50 A	Fender F85	£ 178 00 D	Antoria DX60 Banjo Antoria Banjo with Sruggs Case !	£100.00 Ø
CSU 100 Digi Sequencer	£386.00 C	Roland CR 78	£348 OD B	Ovation Applause	£ 138.00 D	Fiddle Outfit	£ 32.06 C
wasp synth	. £175.00 B	Korg KASS	£186.00 R	Ovation Elec Matrix	£ 198.00 D	Harmony Flat Back Mandoline Maya Artiste Mandoline	£ 87.00 C
Roland VKI Organ	£175.00 C . £1535.00 F	Newport	£ 43.00 A	Ovation Elec Artist	£ 322.00 O	Portuguese Flat Back Mandoline Harmony Flat Back Mandoline	£ 34.00 C
<u> </u>		Boogie Bass with sust	£ 132.00 €	Yamaha FG 335 Yamaha FG 340	£ 97,00 D	Showbud Pedal Steel	£ 390.00 D
MAD OFFERS				Yamaha FG 345	£ 135.00 D	American 3P/Steel	
		List E318 Mad Price £19		ROLAND BOSS PEDALS	EFF	ECTS	
Roland DC 20 E		List £254 Mad Price £14	9	Noisegate	£ 33.91 A	Wah Wah	F 20 37 A
	SOUND	ROOM		Touchwah	£41.60 A	Tremolo	£19.10 A
ROLAND GA 60 Rock Amp Combo	£ 326.00 F	VS Bassamp Combo	£ 284.00 F	Overdrive Comp Sustain	£ 38.00 A	Supa Tonebender	£23.63 A
		Studio 50 Combo	£ 188.00 £	Phaser	£46.30 A	Supa Wah Fuzz Swell	€ 31.80 A
JC 60 Combo	£ 351.00 F	PRO 100 PA speakerseac PRO 150 PA speakerseac	ch F 204 00 F	Chorus mono Spectrum	£33.00 A	Gigster Ahythm Unit	£45.15 A
JC 120 Camba	E 465 DO F	Performer Head 150W Mosfet Performer 212 combo 150W	£ 302 00 E	Chorus Stereo mains	£134.00 A	Vocaliser	£45.15 A
JC 200 Amp Head	£ 395.00 E	Performer 410 combo 150W	£ 458.00 F	KM4 Keyhoard Muser	C 50 00 A	Furnted Reverb Unit Mains	£52.50 A
M/Vol Head Valve 50 Watts	£ 189.00 E	Super Sixty combo 60W Ltd ed Power Baby 150W	£ 477 00 E	KM40 Muxer 4-1 S&R per Chan Rack TU60 Elec Tuner	E 45.00 A	Schaller Volume Pedal	£17.55 A
M/ Vol Head Valve 100 Watts	£241.00 E	Bass Machine head 250W	£ 303.00 E	TU120 Elec Toner Soci	£82.00 A	Crybaby Wah	£26.50 A
4x12 Cab sl or st 100 Watts 4x12 Cab sl or st 120 Watts	£ 189.00 F	21st Century Module effects	£98.00 B	COLORSOUND		BILL LAWRENCE,	BIG
50 Wait Combo Valve	£ 265.00 F	12 into 2 moxer	£ 381.00 D	Swell	£19.85 A	ECHO UNITS	DISCOUNTS
CARLSBRO Stingray S/Lead Combo	£252.00 F	SM 200 Mixer Amp \$ 130 Slave	£ 138 00 D	Wah Swell	. £22.85 A . £25.65 A	Roland RE201	£ 395.00 C
Slingray S/ Lead Head reverb	£ 158.00 F	HH 16 in 2 mixer XLR MM 12 in 2 mixer	£ 575 00 F	Jumbo Pedals Tonebender		Evans EP50	£125 AA B
Stingray Bass Combo	£ 259.00 F	MM Submix	£ 120.00 B			Wem Copycat	£97.50 C
K 100R Lead Combo	£199.00 E	V150L Mos Fet amp	£ 290 00 E	Maxwin Funky Kit inc Stands	DRUM	CELLAR	5.05.00.4
K 508 Combo	£173.00 E	V500 Mos Fet 250W x 2 chan V800 Mos Fet 400W x 2 chan	£ 370.00 E	Waxwin Stade Kil 5 drums i Stands	£ 285 00 E	10 inab	C 24 00 A
PA 100 Reverb Amp	£175.00 E	FI case for 2x S500D	£ 199.00 ₽	Maxwin 12"+13" Conc. Tom & Stand	£ 44.50 H	12 inch	£ 36.00 A
Redmere Soloist Combo + Pedal			£ 388.00 F	Tama Swinoster 5 dr + Iron	£ 80.00 B	Hototom Park	£ 54.00 A
Reverb Lead Amp 100 Watts	£175.00 E	Roland 301 space Echo	£ 449.00 O	EERLI MOV / OF + NOW	6 520 AN F	Adactors	C E E C A
Pro Reverb		HH Dinital Effects Module	£ 172.00 B	Tama R/Star 5 dr	£ 550 ND F	PAISTE CYMBALS 20% OFF	
Champ	. £ 79.00 D	SIP 300 Guitar pre amp	€ 144.00 C	LUGWIG BOCK 5 dc	C E 46 00 C	HEID 7 VALTAGEAR 741 BULAN	LOW PRICE £266.00 F
Micro Combo 30 Watts	£149.00 E		£ 173.00 D	Premier 5 dr SN 24" 18" 14" 13" Premier 5 dr SN 22" 16" 14" 13" Premier 6 dr SN 24" 18" 16" 14" 13"	£ 469.00 E	Chinese Gong 20 inch	£170.00 F
4x12 Gab	£191.00 F	SBF 325 Stereo Flanger		ZUUU, Heautys etc from	£ 102 00 E	SYNTH DRUMS	
VS Bass Amp Head	E 174.00 D	SVC 350 VocoderSPC 355 Pitch/volts	£ 466.00 C	Tama Superstar 5 Drum + Iron LE BLONDE CASES ALL SIZES	E624.00 E	Synare Sensor	£ 79.00 A
va Masiciali Çuttido		Multi Rack		LOTS OF LATIN PERCUSSION ROTOTOMS		JHS Synth Drum + Stand	£139.00 C £345.00 C
SHURE	MICRO	PHONES MM (PACE)		6 inch	£ 19.95 A	Musicaid 4 drum SDS 3	E614.00 C
SM 58 Pra Lo imp	£ 70.00 A	MM95 Lo imp Card	£64.60 A	PERSONAL SHOPP	ER2 W	ELCOME	E&OE
565D Unisphere 1 Qual imp	. £ 50.75 A	MM6 Low imp Super Card	£43.90 A	MAIL ORDER (UK	Mainta	nd)	
PE 588 Unis + case Hi imp	£ 34.00 A	MM5 Low imp Omni		add A=£2.00 B=£3.5			£15 00
588 \$A Unis B Hi imp	£ 28.35 A	ST 220 StandST 201/a1 Stand	£ 35.00 F	F= call for a quote.	L	5.55 D E10.00 L-	_13.00
AKG		ST 201/a2 Stand Folding ST 210/2 Fold + Boom	£ 22.20 F	Phone credit card nu	ımbar 4	for immodiate de	atab
D1200E Lo imp	£ 57-50 A	SCH 211 Boom Arm	£ 10.40 A				aten.
D202E Lo imp	£ 44.50 A £ 85.00 A	SCH 211/1 Boom Arm tele Other types available in stock fro	om £14.00 A	Cheques etc. payable	COPT	eeumans Ltd.	
BEYER M 260 N(C)S Lo imp		AKG & Shure windshields, goose		FREEDMANS PRO		ALL ITEMS ARE:-	-
M 400 N(C) Lo imp Cables extra for Beyer	£ 61.00 A	Beldon cable XLR's jacks line		In stock at press date			
Courts tates for Beyer	E 7.90 A	Shura Lo to Hi reversable transfo		Inclusive of VAT Fu	Ily gua	ranteed.	Α
	GUITAR	Galla tape per roll	£3.75 A	Open:- 9.30am - 6.00	Opm. C	losed Thursdays	
Antoria semi Bass	£137.00 D	Avon Marauder copy	£ 95.00 D				
CMI Rick copy	£194.00 D	Antoria Custom Black	£195.00 D	I am particula	arky	nterected in	
Shaftsbury Rick copy	£199.00 D	Krammer 450G	£451.00 D	Train particula	ану п	inciested III.	
Maya fretless bass	£173.00 D	Antoria Strat + FREE CASE	£ 127.00 D	1			
Krammer DMZ 5000 bass	£399.00 D	Craftsman Şirat + case	£131.00 D	Lai			
Krammer 650B Bass + case	£465.00 D	Washburn Hawk	£ 214.00 D	Please send	me	turther detai	is as
Yamaha BB800 Bass + case Yamaha BB1200 Bass + case	£385.00 D	Shergold Masquarader	£ 190.00 D				
(banez ST 55 Hondo II	·····£135.00 D	Antoria LP	£170 00 D	soon as poss	ible.		
Ibanez ST 300 Active	£272.00 D	Westbury D/luxe Krammer DMZ 1000 nat fin + ca	CIDE OF D				J. J.
Fender Strat R/N L/T	£ 302.00 D	Antoria 12 str EKO Ranger 12 str	£ 138.00 D	Name			
Shallsbury LP	£ 165.00 D	EKÖ Ranger 6 sır	£ 68.00 D	i Address			
Yamaha SG 1000 + case	£ 375.00 D	Hokada 12 str		I Addiess			
				1			
	Ac	cess BARCLAYCA	RD	Ĩ-	^^-	004 11 1 -	
HIRE				! Freedmans,	02/-	ชชา High R	oad,
PURCHASE		VISA	:	Loutonetone	1.0	ndon E11	Tole
		AMAMAND:		Legionstone,	. LU	ndon E11.	i et:
EVDOOT A	ALD D	ADT EVCUAN	CE	101) E20 0200)		

(01) 539 0288

48

EXPORT AND PART EXCHANGE



THE PRODIGY

The Moog Prodigy is, in our opinion, the best value performance oriented synthesiser currently available. Superbly designed and engineered, the Prodigy features all the requirements of a lead line synthesiser regardless of cost, come and try one at our store, we are always in stock and our price is the lowest in the country.

	R.R.P.	Argent's	Roland RE201 echo/reverb	399.00	292.00
	£	£	Roland CE2 mono chorus	63.00	47.00
Roland Jupiter 4 programmable polyphonic	1,810.00	1,325.00	Roland RE301 chorus/echo/sos/reverb	633.00	465.00
Roland Promars Programmable Monophonic	1,057.00	775.00	Roland DM1 delay machine	155.00	99.00
Roland Vocoder plus choirs and strings	1,315.00	965.00	Roland cube 40 compact combo 40W	240	176.00
Roland RS505 paraphonic synth/strings/bass	1,229.00	675.00	Roland cube 60 compact combo 60W	288.00	212.00
Roland RS202 strings/brass	740.00	395.00	Roland cube 60B bass combo 60W	303.00	222.00
Roland MP600 piano with graphic equalizer	740.00	545.00			
Roland RS09 organ strings	531.00	375.00	ROLAND RACK-STUDIO EFFECTS		
Roland SA09 organ/piano	499.00	365.00	Roland SPC 355 pitch/voltage synthesizer	491.00	359.00
Roland SH2 two oscillators and sub-osc	559.00	409.00	Roland SVC 350 vocoder	584.00	427.00
Roland SH09 one oscillator and sub-osc	299.00	219.00	Roland SDD dimension D	283.00	207.00
Roland VK1 combolorgan 9 drawbars and			Roland SPA 240 2x120w stereo power amp	351.00	257.00
Chorus/VIB	850.00	480.00	Roland SPA 120 2x60w stereo power amp	217.00	159.00
Roland CR78 programmable compurythym	505.00	369.00	Roland SBF 325 stereo flanger	279.00	204.00
Roland CR68 compurythym	340.00	249.00	Roland \$1P 307 bass pre-amp	199.00	146.00
Roland DR55 Doctor Rythym programmable	89.00	66.00	Roland S1P 300 guitar pre-amp	180.00	132.00
Roland CS Q100 digital sequencer	478.00	349.00	Roland SRE 555 chorus echo	622.00	455.00
Roland MC8 micro-composer	4,816.00	2,875.00	Roland SEQ 331 31 band equalizer	255.00	194.00
Roland KM60 6into2 stereo mixer	224.00	165.00	Roland SEQ 315 2x15 band equalizer	300.00	219.00
Roland 100m studio system 5 module system	1,323.00	975.00	Roland SMX 880 8 line mixer	199.00	146.00
Roland CE1 stereo chorus	154.00	113.00	Roland SPH 323 stered phaser	249.00	182.00

Allow us also to quote you on the excellent range of "jazz chorus" amplifiers and any other equipment you may require. Our service department exists for the benefit of all our customers and can maintain and modify your equipment as and when you may require.

Call at our store for a friendly and professional demonstration of any of the products listed.

20 Denmark Street, London WC2H 8NA Telephone: 01-240 0084/5



SPECIFICATIONS **TSB 650**

Super contoured ask body with maple/walnut transmit-neck that runs right through the body to give maximum sustain. This model has two dual coil MB III pick-ups each with separate tone and volume controls. Dual coil can be linked together in series or in parallel by the dual sound switch to give a wide range of tone facilities.

CICSVIII FO Way, Heston. Middx. 01-897 3792 nearest stockist.

South Drive, Phoenix ARIA guitars are available only from our approved Agents. Write or phone for your



TS 400

Body: Sycamore/maple/sycamore. Protomatic III pick-ups. Master volume control, tone controls, pickup selector switch, coil tap switches. phase switch.

Neck: Laminated maple, fixed. Rosewood fingerboard. The combination of phase and coil tap switches combined with the Protomatic III pick-ups produce both humbucking and clean single coil sounds.

TS 500

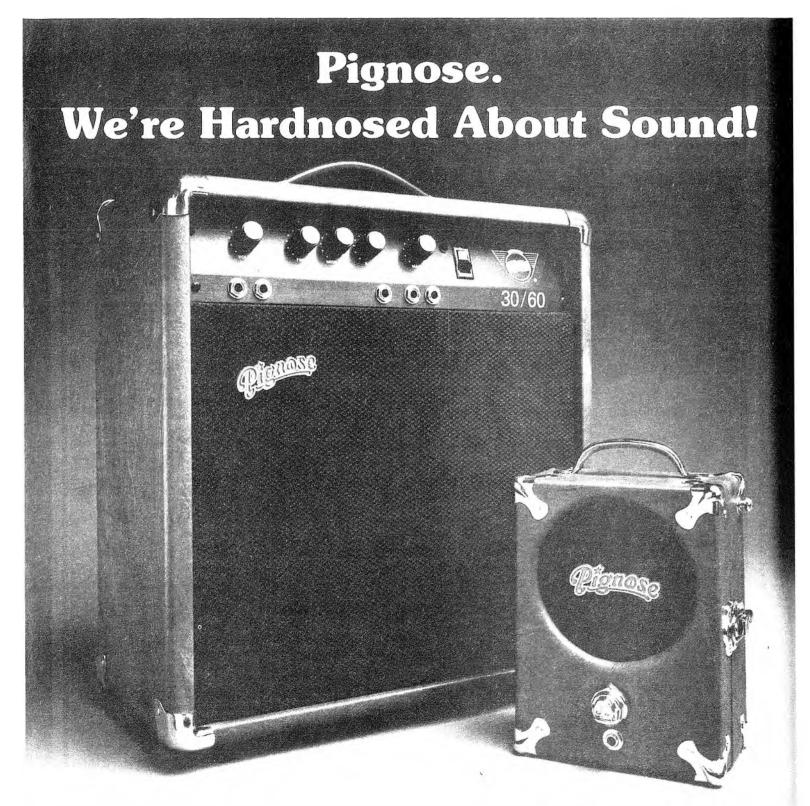
Body: Sycamore/maple/sycamore. Protomatic III pick-ups. Master volume control, master tone control. pick-up selector switch, booster volume control, booster amp switch, two coil-tap switches, phase switch, 6-position tone selector. Neck: Laminated maple, fixed. Rosewood fingerboard.

TS 600

Body: Ash/maple/ash. Protomatic III pick-ups. Master volume control. Master tone control, pick-up selector switch, booster volume control. booster amp switch, coil tap switch. phase switch. 6-position tone

Neck: Laminated maple/walnut. transmit, Ebony fingerboard.

PRICE INCLUDES PLUSH LINED FITTED CASE



Everyone knose the legend of the Pignose. The first completely portable great sounding amplifier. Now the new Pignose 30/60 is the first great sounding amplifier powerful enough for any playing situation and portable enough to get there. It turns out a bright, clean sound that's warm like a tube amplifier. But it's reliable and lightweight like the precision solid-state instrument it is.

Of course, the 30/60 offers legendary Pignose quality and a host of wanted features. Like three-band equalization for a wide range of tonal colors. Active frequency ranges perfectly matched for guitar. Infinitely variable harmonic character from detailed, clean sound to smooth

distortion. Plus a unique effects send and return feature.

Power output is 30 watts RMS, 60 watts peak, through a $12^{\prime\prime}$ Eminence speaker. For details on the versatile, powerful, portable Pignose 30/60, see your dealer or write:



Hatfield /A10 ΜI M10 M11 ESS **ESS** Mi Watford A40 LONDON Μ4

BARNET 01-440 3440 **OPEN EVENINGS UNTIL 7pm**

H/H PERFORMER SERIES SUPER P/X DEALS

Much more than you'd think allowed on your old amp head, combo, cab, etc.

e.g. £160 H/H Combo

£105 H/H Head

£225 Fender twin

£130 Marshall 100w head

£150 Acoustic 301 head

When you BUY an H/H PERFORMER head, combo, stack, Bass combo, or Bass Machine, and trade in your equivalent unit, i.e. PERFORMER 212 Combo £392

 $P/X\,H/H\,V.S.\,Musician$ £160 You pay ONLY £232

AFFORDABLE! TRUCKABLE! POWERFUL! TURBO SOUND!

YOU OWE IT TO YOURSELF TO TRY TURBOSOUND SPEAKER SYSTEMS - CHECK WITH US!

TB 3020 Full range, $2 \times 15 + 2 \times 10 + Bullit$ TB 1510 Full range, $1 \times 15 + 1 \times 10 + Bullit$ £356.00 TB 215 Bass Bin 2 x 15 £316.00 TB 210 Mid/High $2 \times 10 +$ Bullit £271.25

MULTICORE MADNESS

Everyone tries to save money with cheap cable BUT YOU can save money by buying the best - BELDON! £239 gets you a complete 100ft Multicore system with XLR connectors suitable for ANY mixer with XLR inputs up to 16 input channels and 3 returns. YES ONLY £239!

WEEE! ZAP! POW! ZUB

The ELECTRO-HARMONIX Space Drum probably one of the best drum synths - CERTAINLY THE BEST VALUE! especially at our price

SMALL COMPACT PA SYSTEMS!

We've checked them all! But we always come back to MAINE'S amazing 200w PA Head with graphic EQ team. it up with their $2 \times 12 \times 2H$ Cabs and you have just about the best small system you can buy! Cost? - from ESS the Head only £269.00 inc. VAT. The System £569.00 or even the complete system including Monitor £679.00! All covered by the FAMOUS MAINE GUARANTEE!

S

However if you want something really small and powerful TEAM UP A MAINE 200w PA with a pair of OHM 4×5 's — A 200w system that you truck on the back of a Moped -- check with us -- system Price ONLY £459!!

WE WELL OUR BODIES...CHEAP! DI MARZIO custom bodies at amazing prices. While stocks last!

Precision bass beautiful custom striped wood £65.00 £37.95 Stock Strats std. ash L/T Strats routed (or 2 H/Bs and Trem £39.50 Custom Strats as above but custom striped wood £59.00

Plus Brass bits in stock - check with us!

Guitars Aria SB1000's in stock, new &	Amplification Marshall MV50 Combo	£195	WIDE RANGE OF ACCESSORIES AND T	
S/H, from £31 Fender Strat, walnut, M/N trem £22 Fender Tele bass, new, only Aria Pro II PE600, new, only Aria TS500 switchmad!, new Aria NK700, through-neck, beauty £26 Lincoln, through-neck, fantastic	Marshall Super Bass 100, like new 29 Marshall 4×12, like new 39 H/H IC100 heads, from fi H/H VS Musician Combo, new	£269 om £125	E/H Small Stone E/H Little Big Muff E/H Mini Synth E/H Electric Mistress Switchcraft A3M × LRs Switchcraft A3F XLRs Beldon leads, switchcraft jacks, 1ft	£27.50 £13.50 £79.00 £43.95 99p £1.15
value £16 Vantage 2P/U, good value, only £12	9 135 Cab Vox AC30, new, only	£399 £279	Various lengths, etc. through to 25ft DiMarzio Pickups, e.g	£7.50
Vantage Paul, glue-in neck, only £13 Pearl LP Std copy £9	new, amazing Peavey Artist 120w with JB	£169 L £259	SDS1 EMS Polysynth, 1 only, ½ price	£16.00 £695.00
Kramer 350G, new, last one at this price £15 Shergold Marathon Bass £14	½ price, only	£139	EMS Vocorder, 1 only, only Guitar Tuners, "match me type, only	£495.00 eter" £29.00

The above is just a sample – More in stock!

Open weekdays 10 am until 7 pm Saturdays 9-5.30





Mail Order Just give your credit card number for



230 High Street, Barnet, Herts. 01-440 3440



The largest number of new Peavey models ever released for first time showing at the 1980 British Music Fair — Peavey makes it happen!



OLYMPIA AUGUST 17 to 23 Sponsored by:

Sponsored by: The Association of Music Infestigation and Melody Makes New amplifiers, speakers, guitars & basses, tri-amp systems, electronic x-over mainframe, mixers, power amps, strings, accessories, etc.



THE WORLD'S HOTTEST SELLING RANGE OF
MUSICAL PRODUCTS, DISTRIBUTED BY:
PEAVEY ELECTRONICS (U.K.) LTD.,
Unit 8, New Road, Ridgewood, Uckfield, Sussex, TN22 5SX

K \$

Less than 18 months after they burst upon the national consciousness with "The Sound Of The Suburbs", The Members find themselves in the unfortunate position of having to restart the long haul to a wider public almost from scratch. Since the band in question offer a sublime blend of sophistication and power, dealing wittily with a variety of subjects and *using* reggae elements rather than aping them, I can only think that their last autumn's world tour and a period of concentrated recording in early 1980 are responsible.

Last year's debut album, At The Chelsea Nightclub, must have surprised even their staunchest fans with its quality, while "Offshore Banking Business", the inspired reggae follow-up to "Suburbs", was the kind of mini-hit that people remember far longer than many mediocre top-tenners. Now 1980 - The Choice Is Yours skims blithely over the usual second album traumas, proving at least as subtle and intriguing as its predecessor. (Sales so far have suffered from the various playlists' refusal to bite on the excellent single, "Romance".) Since The Members' arrangements are invariably put together with obvious care, I sought illumination on the nuts and bolts of the process from their very different quitarists. Jean Marie Carroll (alias JC) and Nigel Bennett. I wasn't disappointed.

When we first met, JC, you said you more or less learnt the instrument as you went along. Is that an exaggeration?

JC: I have learnt an awful lot since I've been in The Members. I hadn't played in any other band...I'd messed around with an acoustic guitar.

You were pretty proficient when you joined, weren't you, Nigel?

NB: I suppose so. I'd hardly played in any bands — just school bands and knocking around with a few other people

Unless JC's being overly modest, wasn't this gap between your techniques a problem?

NB: It wasn't at all, actually. I knew nothing about playing in a band which was gigging regularly.

JC: You learn a lot more when you start playing live, no matter how well you play in your bedroom. When Nigel joined the band (previous lead guitarist Gary Baker has a song on Nightclub) we needed somebody that was very proficient on the guitar.

The reggae input is mainly from JC out of you two, isn't it?

NB: JC has a more kind of schlangy, choppy kind of style which you'd associate with reggae. He listens to much more than me.

JC: We work it out. On a number on the new album like "Goodbye To The Job", we think well, obviously you can't really have reggae guitar in that. We look at a song...for example, Nigel plays more or less all of "Flying Again": that's what his guitar style's suited to.

NB: And you're playing more or less all of "Clean Men" — but live we're both playing all the time.

Though denying the "Ritchie Blackmore" tag given him early on by Sounds' Gary Bushell, Nigel admits that he "used to listen to a lot of the old guitar heroes". A song like "Don't Push" certainly owes something to The Yardbirds' "Over Under Sideways Down", while "The Ayatollah Harmony" (the Bennett-composed instrumental which opens 1980) also contains hints of early Beck.

JC: That's the Burns tone...what we've gone for on the album is more English guitar tones than American guitar tones. American guitar tones are too standardized: you could classify it as a Gibson played through a Music Manamp."

NB: A band such as Boston seem to have this wall of sound which is much cleaner and precise. It's very sterile — compare that with somelike like Steve

...what we've
gone for on the
album is more
English than
American guitar
tones

Jones of the Pistols' wall of sound: that I would say is quite an English one.

Has your equipment changed much since you started?

JC: I've always had the same amplifier which I bought when I first joined the band — a Fender Twin Reverb, which I think is a very good amplifier. A bit boring, saying "I've always used one" (laughs), but I have.

NB: "I had a WEM amplifier at school which blew up, then I had an HH Combo which I really didn't like at all. They seem to be quite popular, but I found it horrible — I only got it 'cos it was so portable. As soon as I could, I soid that and bought an old Marshall. I've been using Marshall every since. I use a Les

Paul guitar and a lot of people think *immediately*, if you've got a Les Paul and a Marshall you're gonna sound exactly like Thin Lizzy in tone, but there's so much variance on our album. I virtually use that combination on all the tracks and there's so much sound variance. You can get a lot out of those two.

What guitars have you tried?

JC: I started off with a Fender Music Master, which is very cheap - almost like a junior model. When we got a record deal I bought myself an adult one a Jazz Master — and I played that for a long time. Then we went to America and I played a Stratocaster all the time we were there. That was great and I had it stolen, which is a warning to any musicians at Los Angeles airport: never undertip the porter, 'cos he's likely just to leave all your guitars in the middle of the aiport. We were in New Zealand and the next day - no guitars, Luckily, five turned up on the next flight (out of six). We're still trying to get the money out of Pan-Am. When we got to New Zealand, they don't hire guitars out - we had to advertise on the radio.

NB: I initially bought that guitar — the Strat — and then I found I didn't really like it and so JC started using it and loved it.

JC: The first four nights in Australia it was the same — I'd find someone in the town with a Stratocaster and borrow that. They really varied, which put me off because I'd had this great one. So I eventually came back to England and decided for a change of tone and bought a Rickenbacker, which I think is a reallygood '60's-type sound.

With the tour taking in Canada as well, did you find any problems with transporting guitars?

NB: We bought good strong flight cases ages ago, which were a good investment.

JC: In Australia we had to change the strings more or less every day, 'cos they literally rotted...heat, humidity and sweat from the gigs. If you didn't wipe them immediately you came off stage they literally rusted away.

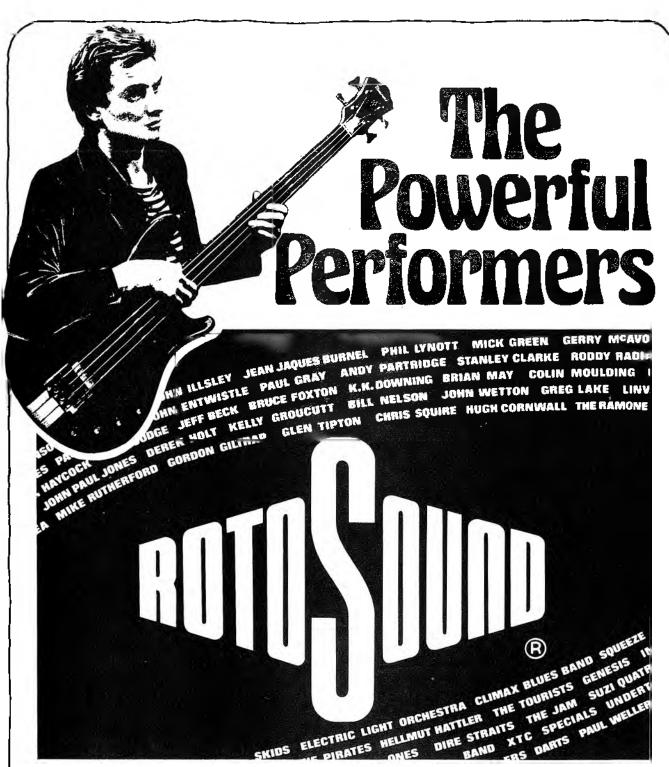
NB: The guitar was wet every night, really wet — like someone had thrown water on it.

JC: If you're in somewhere like Brisbane, which is really a tropical area, you'll be playing live there with the lights — they insist you have to have a full light show. Absolutely ludicrous."

Have you evolved a definite preference for certain strings?

NB: I've always liked D'Addario strings. They're cheap and they're as good as any I've ever found — I've been through them all recently.

JC: I always use Rotosound strings, but there's some American ones — which are again D'Addario — called Light Tops and Heavy Bottoms, which



As well as **Sting of the Police** take a look at some of the other top bass guitarists and guitarists who carry exclusively either **ROTOSOUND Swing**

Bass, Jazz Bass or our very popular range of Gauge Selection sets from .006"-.014"

Why not join them!

Sole Manufacturers:

JAMES HOW INDUSTRIES LIMITED
20 Upland Road, Bexleyheath, Kent, England.

you can't get in this country. So I use Rotosound instead.

The production on your albums (Steve Lillywhite and Rupert Hine, respectively) is very clear, without being antiseptic or lacking in power.

NB: On the last album we had a great engineer called John Brown who was very meticulous in getting a good sound for both of us.

JC: We recorded the backing tracks in four days for 1980 — so you've got to go over every song while you're recording the backing tracks and think "Right, now this is a different type of song again. How are we gonna alter the sound?" A lot of people put albums down with more or less the same guitar sound throughout, which can give you a continuous sound, but never makes any tracks really stand out."

NB: Sure. I bought a great new pedal today: MXR Compressor. I only use like, one for solos, to boost it up. I'm really excited 'cos I'm gonna try it out tonight. I've had so much trouble with pedals for ages — most of them, as soon as you click it on it distorts the sound as well, makes it kind of fuzzy like a cheap preamp.

Do you pay much attention to lyrics when you're deciding what to play?

JC: Usually the writer of the song explains to the group what the song's about and what the vibe is — it sounds a very old-fashioned word, but it's a word you use quite a lot in the studio — what the feel to the song should be like. We argue it out, basically.

NB: You can't just play with a backing track, without knowing what it's all about.

JC: Some people do.

NB: I suppose so. Personally, I'm very conscious of the lyrics.

JC: We record most of the overdubs after the vocal, so you've got a basic backing track, you put a vocal on it and then you look at the song and say "Now what parts of the words constitute a climax?" and bring about a musical climax at the same time.

The arrangement of Larry Wallis' "Police Car" (where the vehicle becomes a symbol of the Old Bill's less attractive side) is very much related to the words...

JC: Especially some of the guitar work Nigel does on that. We used this harmonizer on the guitar...a lot of the things Nigel did on it wasn't in fact what you'd call traditional guitar playing, but making a threatening noise. You could be really obvious and go (imitates police siren) all the way through...

NB: It's a more eerie, kind of squeaky noise.

Both cite Adrian Belew, guitarist on David Bowie's Stage, as an example of the kind of approach they admire.

JC: I wouldn't call it free-form guitar,



'cos It's very disciplined...

NB: ...using a very broad range of the instrument, really thinking a lot about all the different possibilities you can get out of it.

JC: Feedback is a prime example. Nigel plays several *tunes* in feedback on "Physical Love" on the album. It's worked out by running round...

NB: Yeah. Just turn the amp up bloody loud, so the thing's going to feed back as soon as I take my hands off the strings. By turning your body inside the studio, it picks up on different frequencies and makes different notes. I just have to learn which way to move.

JC: It's almost like "choreograph yourself".

Electric and acoustic guitars are totally different instruments, aren't they? There's hardly any relation.

JC: There is hardly any relation, but a lot of guitarists these days — they've got guitar plus electricity, but there's a middle way which is not *too* distorted, almost like an organ, which is featured on a lot of records these days instead of an actual accustic guitar being strummed. People think 'Oh, acoustic guitar's whatsisname, Richard Digance' — they don't wanna sound like Richard Digance and they don't wanna sound like Jimi Hendrix, they wanna sound safe

On the world tour, did you develop new things or was there a tendency to stick to what you knew?

NB: When you're doing nine weeks on the trot, unfortunately towards the end of that time you are doing a show like some kind of recital.

JC: We did change the numbers, because you can't play a number exactly the same for the rest of your life. It does something to you if you have to play 'Sound Of The Suburbs' exactly the same every night, even if you just change the rhythm...without disappointing the fans, of course.

Did the way you played together

JC: It's only in the last nine months

that we've actually got together and collaborated properly. Usually, it was just him standing on his side of the stage and me standing on my side of the stage — we knew we both had totally different sounds and 'Never the twain shall meet'.

NB: It's largely to do with equipment. For instance, in America every night it was a different PA and so sometimes you just can't hear what the fuck's going on at the other side of the stage, so how can you play with someone? These days we've got our back line sorted out, we know what kind of monitor sound we like and I from my side definitely do hear more band sound.

I was amused by your comments recently about the type of band for who the number of guitars is a status thing.

JC: They usually all sound the same, as well. We carry a spare guitar each on tour, but they're completely different-sounding guitars. Nigel's got an old SG which is his spare, I use a Rickenbacker with a Jaguar as a spare. There's no point in having two guitars that sound the same. I saw that group Def Leppard and I couldn't tell what was happening. It's just exactly the same sound coming out of either side of the stage, so it's just double-fatter when they're both playing rhythm. It doesn't give you any great variance.

Among The Members' ploys are brief interludes reminiscent of The John Barry Seven, while "Romance" features a whiff of Hawaiian guitar... or does it?

NB: It was one of our road crew's Stratocaster flat on my knee. First of all I used a bottleneck and picked one line, then went over and did the harmonies to make it sound slightly Hawaiian — so it's just two takes.

There's also an intriguing, dobro-like flurry on "Frustrated, Bagshot" on the first album...

NB: It's slide acoustic.

JC: And I'm playing electric guitar in the background. Using acoustic guitar for a lead...can sound good.

And the collapsing "My Generation" guitar solo in "Nightclub" itself?

JC: I've always played that. There was always the typical guitarist getting completely carried away on the last number and fluffing it horrifically. There's also the Bonzos' solo in "Canyons Of Your Mind" - after you listen to it a few times, it sounds completely right, but just completely going over the top. If somebody smashes a guitar on stage you wouldn't hear it on a recording - it doesn't sound like a guitar being smashed on stage. But if you play it really badly, or almost a free-form way, then it sounds like a guitar falling to pieces. I sometimes play "Don't Cry For Me Argentina" - in a different key - in that bit, just to break the boredom!

SOMO SELLOUTIV



Fender Shoulder Bag (5,99 inst. P.&P. . . . and Holdall. EV. 99 incl. P.&P.



Fender Belt & Strap Pack
Get a matching Fender Guitar Strap and Belt. As seen worn upside down on T.V.

Fender Guirar Strap
The famous Fender Strap
R.R.P. 46-13
£4.99 incl. P.&P.

B.R.P. 242-111 / 6 99 ind P.&F

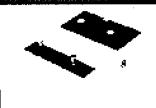


Fender Guitar Leads

COILED 25' 45,99 incl. P.&P. 20' 45,49 incl. P.&P.

PEDAL SALE
"Brand" Name Doublers Power
Drivers:

LAST FEW LEFT. ORDER NOW!! STRAIGHT 25' \$5.49 incl. P.&P. 20' 84.59 incl. P.&P.





Fender String Sets		Our Price
AO-70, Bronze Acoustic		
AO-70XL, Bronze X-Light		
Acoustic	£3:22	
AO-12, Bronze 12 string		
N220 Nylon Classic	€2.73	
N330 Black Nylon Classic	£2.73	
N440 Nylon Ball End	£3.30	
AO. 15 Ácoustic Silk &		
	€3.88	

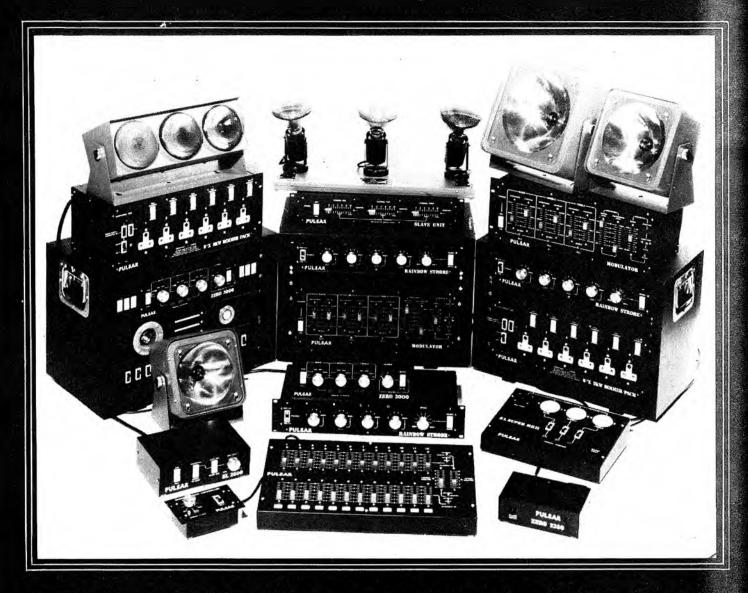
Please Note: When ordering six or more sets of the same model number a further 10% reduction is offered. Please adjust payment

ORDER FORM ICALLERS ALSO WELCOME)

To order any of the above items, work out the value of your order (all prices include V.A.T.) and make cheques & P.O.'s payable to Soho Sound House Ltd.

. Address Name Please send me: T-Shirts (Size) Belt & Strap...... 20' Straight Lead.............. Shoulder Bag....... Strings 25' Coiled Lead...... AO-70 AOA70XL AO-12 N220 N330 N440 AO16......

18A SOHO SQUARE, LONDON W.1.



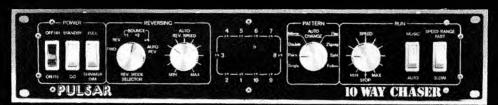
GET INTO IPULSAR LIGHTING CONTROL.

Professionals in more than 30 countries across the world agree that when you're talking about Pulsar, you're talking about the finest electronic lighting controls. Bands everywhere are making Pulsar their first choice, valuing Pulsar reliability as well as the artistic scope to create exciting lighting effects.

Pulsar equipment is constructed to standards which meet the gruelling demands of life 'on the road', and can adapt to all mains systems in use throughout the world.

Pulsar lighting control systems are completely versatile and are designed to be built up from a few thousand watts to systems of immense power handling simply by linking the units together.

Bands all over the world are working with Pulsar.





SAR CONTROLS THE LIGHTING PROFESSIONALS USE

PULSAR LIGHT OF CAMBRIDGE LIMITED
HENLEY ROAD CAMBRIDGE CB1 3EA ENGLAND Tel: (0223) 66798





BY LYNDEN BARBER



It all started in the late Sixties, when phrases like "breaking down the barriers" and "musical hybrid" were thrown about as freely as bog rolls at a football match. The barriers in question were those between jazz and rock and the idea of merging the two was considered fresh and exciting. A plethora of young English musicians, tired of the excesses of acid rock, decided to dig out their Mingus and Coltrane albums to pick up a few tips. If only they could marry the musicianship and imagination of jazz with the adrenalin of rock...these college types' minds boggled briefly before donning cool shades and diving into the rehearsal basement.

Saturday afternoons just wouldn't have been the same without the Soft Machine, augmented by the front line of Keith Tippett's group, blasting away for 20 minutes on the John Peel show (you were really cool if you liked bands that played non-stop for 20 minutes).

Meanwhile across the Atlantic, similar ideas were stirring. Miles Davis was preparing the ground with a whole string of albums — Filles de Kilimanjaro, In a Silent Way and Bitches Brew, the ultimate status symbol for sixth formers. The Tony Williams Lifetime decided to mix free jazz with electronic rock, with potentially explosive effect (they were largely ignored).

Then it happened. Ex-Miles and Tony Williams guitarist John McLaughlin got religion, formed a band of virtuoso musicians and called it the Mahavishnu Orchestra. The Second Wave of Jazz-Rock was born. Eight years later and the idea of a union between jazz and rock isn't so exciting. There's even an established name for it — "fusion". Many of the original innovators have burnt out — McLaughlin seems lost for new ideas, Cobham churns out cliched disco, Chick Corea produces mindless schmaltz and Miles Davis appears to have disappeared up his own back side.

But there are still a few exceptionally talented musicians around who strongly believe that the genre has some creative mileage left, and they're determined to prove it. Some of them regularly get together to form a loose venture called Brand X, and while believing in the positive aspects of the music are perfectly aware of the traps in front of them. As bass player Percy Jones says: "There's a lot of fusion bands over in America, some of them are so cliche ridden. There's a couple of radio stations in New York that play jazz-rock 50 per cent of the time. Some of it sounds like 'fuzak', it sounds really predictable. We try to get away from that, because that's one of the criticisms we get a lot, that jazz-rock is played out. It's not an unreasonable criticism, it's something we're very aware of."

And Peter Robinson, one of Brand X's two keyboard players: "Miles Davis made that breakthrough where you could play jazz tunes through that hard rock thing. It's very hard to keep on coming up with good tunes and present them in that way. Basically it's really masculine music. I wouldn't call it aggressive, it's athletic. There are some sweet things that have come out of it, but basically with the high energy jazz-rock with a lot of technique, generally dazzling the audience, there's a limit to how far that can go, there's not much intimacy. It's really important on stage to display to the audience that it's fun to play, rather than this guerilla warfare."

Brand X have shown on record that it is possible to escape the cliches. Much of their work has consisted of relaxed, atmospheric playing aimed at creating a certain mood — examples include the eerie "Nightmare Patrol" on Livestock and most of the second album, Moroccan Roll, recorded with heaps

of space echo — an area largely uncovered by their US counterparts. On the minus side, they are sometimes guilty of substituting flashy playing for ideas — "dazzling the audience" as Peter Robinson puts it — and pushing their techniques to the limit when the music doesn't demand it. The latest album *Do They Hurt* is a clear illustration of the strengths and drawbacks of jazz-rock in 1980. Many of the compositions are inspired and beautifully played, in particular "Voidarama" and "Act of Will", with synthesized vocal from Percy. But there are also passages of fast playing which shatter the mood that's been built up — or perhaps that's deliberate.

The idea of a band of world-class jazz-rock musicians, coming from Britain, at first seems ridiculous. After all, the major names that have defined the genre have been from the States, virtually all Miles Davis alumni...Tony Williams, Joe Zawinual, McLaughlin (British born but naturalised American), etc, etc. How can a British band possibly match them for musical pedigree?

It may come as a surprise therefore to hear that Peter Robinson had gigs with Stanley Clarke, Lenny White, and master Japanese percussionist Stomu Yamashta, before joining Brand X. And that Herbie Hancock is only one of a list of well respected musicians that drummer Mike Clarke has played with. The other members of Brand X have also spent more than a few years "paying their dues", as we say in the biz — but more of that later.

Brand X caught the public eye almost as soon as they started gigging due to their drummer being The Very Famous Phil Collins of Genesis. It was a definite advantage, once they'd thrown off the tag of being "Phil Collins' part-time band". The group was actually started as an Average White Band-type outfit by a singer called Phillip Spinelli and guitarist Pete Bonus, and initially made an album for Island Records which was scrapped. The original drummer, John Dillon, left for personal reasons and Phil Collins was called in on the recommendation of Island A&R men. John Goodsall recalls: "We tried out some really hot drummers, but Phil settled in straight away with Percy (Jones), the bass player, into a really tight thing just naturally. We eventually got the band together with Phil, Robin Lumley (on keyboards), Percy and me, and the four of us decided that the instrumental passages were a lot more fun. The other two guys started going more andmore into commercial songs and we started going out more into improvisation."

The line-up of the group has constantly changed — not because of musical dissatisfaction, but because the idea behind Brand X is that of an informal group of musicians getting together to play for enjoyment rather than making money. Robin Lumley spends more time on producing these days, although he did play on a couple of tracks on their latest album *Do They Hurt* and gigged on their recent tour with Bill Bruford's band. Phil Collins also played on the same two tracks, although he doesn't have much time to play with the band now (see the feature on Genesis in the May 1980 issue of IM&RW).

Other members of Brand X have included drummers Chuck Burgi and Kenwood Dennard, percussionist Morris Pert and bass player John Giblin. As current drummer Mike Clarke explains: "It's not like it's my gig, it's like when they want Phil they call Phil, when they feel like calling me they call me, and him and I have been kinda split level the last couple of years."

John Goodsell .

John had a pretty far sighted Mum and Dad. At the age of seven, when most kids were playing with their Meccano sets and Scalectrix, the young Goodsall was given a guitar - a Rosetti Lucky Seven semiacoustic, to be precise. Our John just picked the thing up and knocked out "Telstar" by the Tornadoes and "Apache" by the Shadows, and you could say that since then he has never looked back. He left school at about the age of 16 or 17 to play with a band called Babylon, with Carol Grimes on vocals and Tommy Ayres on keyboards, and then went on to join Alan Bown, gigging around tiny clubs and halls seven nights a week. "It was interesting, those bands were playing jazz-rock kind of fusion," says Goodsall, "It was soul riffs but sometimes it would get heavy and there would be horn players and

Life on the road continued with Atomic Rooster, with Vincent Crane on "heavy metal organ" and Rick Parnell on drums, where John started "getting into the more legato sound, screaming sustain and feedback." He met the founder members of Brand X after that when he hung around in London playing with people in pubs.

He had been listening to people like Sly Stone, Jimi Hendrix and Jimmy Page, and jazz artists like Coltrane, Charlie Parker and the Charles Lloyd Quartet (which included the young Keith Jarrett), but the real musical turning point came when he heard John McLaughlin, "I'd heard him with Miles Davis on Bitches Brew, but it was Live Evil that killed me, and Inner Mounting Flame, where I was really frightened by what I was hearing," says Goodsall, "It wasn't humanly possible, I was really worried. I'd be staring at the speaker wondering what was coming out of it, I was really quite scared." McLaughlin is still the most obvious influence to be detected in his guitar playing, and in his compositions - the track "Cambodia" on Do They Hurt is heavily based on the Mahavishnu Orchestra's "Dance of Maya", for example.

Goodsall set about developing his technique "pretty much by feel, I found myself sitting around a lot improvising a lot with an acoustic guitar," and learnt a lot by just playing with the other members of Brand X.

"Pete and Robin are into Lydian modes and Dorian modes and all this kind of thing, and we've hit all that, diminished stuff, flattened semitones clashing. Since I've been in Brand X I've learnt a bit more about soloing over those kind of passages, which is like more of a jazz thing."

John's preference is for hollow bodied guitars - he mainly uses a Gibson ES345 stereo (a 1974 model), which gives a lot of sustain, and a Gibson ES175 for quieter, funkier playing because it has a harder sound and "doesn't feed back so much." He also uses a Fender Stratocaster (about 1974) for louder, rockier passages. "It's got some preamp in it," explains John. "I'm just having it done up by this really good guitar bloke in the States called John Carruthers, who designs a lot of stuff for Yamaha and Ibanez." His guitar strings are Rotosound Superwound, gaugers 009 to 042 and his amp is a Burman combo (he thinks it's 160 watts). "I like the pre-amp stages in it, it's all set up in a line, it's no hassle, I can virtually adjust it in total darkness. I find it's very directional, the spread is a bit better than most." John also uses a selection of Washburn guitars.

2etarl: lobinson

Keyboard player Peter Robinson "never really liked pop music" when he was young

"because it was always so atrociously performed." Like percussionist Morris Pert he had a formal training at the Royal Academy of Music, having started playing piano at the age of 11 and "making so much headway that it was decided that I should take it more seriously and get a proper training." But he soon became disenchanted with the restriction of musical freedom enforced by the Academy, "One of the things I was very good at was improvisation, which was essentially discouraged at the Academy," he explains, "You got two minutes of improvisation - what they politely called 'externporisation' - at the end of the year as an ear test. I thought 'why do I keep doing things by other people?" when I could actually sit down and music would come out. So I tried a sort of semi-jazz. I did one jazz gig, a bebop thing, and couldn't understand what was going on. So I turned towards Indian classical music, which incorporates improvisation, and found that was more understandable and I could express myself more clearly.

After leaving the Royal Academy he spent about three years as a session musician, which helped wean him onto a more electric-based diet. He played with Chris Farlowe for a while and then joinled a band called Quartermass.

After Quatermass Robinson was with Stomu Yamashta and Suntreader, a sort of avant garde rock band that also consisted of bassist Neville Whitehead, Paul Buckmaster (of Elton John fame) on cello, Morris Pert, soprano sax player Robin Thompson and Martin Ford (arranger for Barclay James Harvest) on electric French horn, Peter then played with Sean Phillips for a while and got fed up with it, so decided to move to the States.

It was a lucky move. He played on Lenny White's *Venusian Summer* album and then one day received a phone call from Stanley Clarke inviting him to do a European tour, which naturally he accepted. That was how he met Brand X — they were the support band on the tour, and when Robin Lumley left to concentrate on production Peter joined.

Robin came back to play with the band on their recent tour, and it was a strange sight indeed to see two keyboard players squeezed into one corner of the stage sharing the same set up — a Yamaha CP70 electric grand, a Roland string machine, Sequential Circuits Prophet V and a Yamaha CS80.

"We've virtually never had a collision," claims Robinson. "Basically it's like one keyboard player with four hands, rather than two separate units. On most things we've worked out who does what, but on some nights he'll go to another instrument and I'il be going 'what?'."

Percy Jones

You may find this difficult to believe, but Brand X's superhuman bass player was always bottom of the music class at school. So there's hope for some of you frustrated

Jones the Bass has a phenomenal technique which is sometimes hard to believe — a tape of Brand X's Venue gig had the IM&RW staff gasping in astonishment at Percy's solo. And not just at his agility — the man has got Funk with a big F, and his solo spots display infinitely more taste than Weather Report's Mr Superbass Jaco Pastorius.

Percy's technique revolves around resting his thumb on the back pickup of his Wal fretless bass. "If I can't anchor it onto something I can't play properly," he explained. Therefore, there are certain types of elec-

tric bass that he finds difficult to get to grips with.

The Wal bass is made by a bloke called lan Waller, nickname Wal, who is based in High Wycombe. One day Wal approached Percy with a bass to try out and he was immediately impressed. "Before I used the Wal I had a Fender Precision fretless. I could never get enough mid-range out of it, no matter how much EQ I used it would never come out, and it didn't sustain very well. The first thing that impressed me with the Wal was that I could get all this mid-range response."

His amplification is made by Frunt, a small company based in Surbiton. He uses a total of 400 watts, consisting of two 200 watt amps and two cabs, one a reflex cabinet with two 15-inch speakers, the other a 4 × 12 (the speakers are Fane). "It's a pretty straightforward amplifier," says Jones. "Before that I'd used an Ampeg SBT which was good, but it also had a certain roughness in sound, a real second harmonic distortion. I've been trying to get a cleaner sound because with a rough sound. I jut play harder on the instrument. This one does the job."

It was Jaco Pastorius who provoked Jones' interest in bringing out the mid-range on the bass guitar. "I think he's done a lot for the electric bass, not just technique and playing but the sound too. It's still basically the same instrument, a Fender Jazz fretless. But with Fender basses before that all you could hear would be the fundamnetal, I always thought they sounded a bit characterless. So he revolutionised things in that respect, he made the Fender bass sound more interesting."

Another bass player that has influenced him is, surprise, surprise, Stanley Clarke. "I thought that when he first came out he was quite phenomenal." And an early influence was Charlie Mingus because of his "tremendous feeling for his music."

Percy's musical career began when he was studying electronics at Liverpool University. He started playing with guitarist Andy Roberts and they teamed up with Adrian Henri to form the Liverpool Scene (remember the "Fleetwood Mac, Chicken Shack, John Mayall, Can't Fail Blues"?). He became frustrated with the band, did a short tour with the Scaffold and then dropped out of music for a period.

Jones' nimble bass playing seems even more incredible when you consider that he had not touched the instrument for two years before joining Brand X. He was working on building sites and was thinking about which musical direction he wanted to go in. It was during this period that he started listening to early Weather Report and Miles Davis' jazrock experiments, which motivated him to get back into music again.

Mike Clarke

Asking drummer Mike Clarke what bands he has played with before Brand X is like asking Yehudi Menuhin if he has done anything before getting together with Stephane Grapelli. The man's musical pedigree is simply phenomenal.

Mike is the only American member of Brand X, although Percy Jones now lives in New York. He has played drums since he was a child, and has been a professional musician since he left high school. When Clarke was in his early twenties he played with such respected names as trumpeter Woody Shaw, vibist Bobby Hutcherson and blues singer Mose Allison around San Francisco. He went on the road and played "a lot of different blues and jazz gigs" and then met up with bass player Paul Jackson.

"In our desperation to find enough work playing jazz we were starving, so we started playing funk because it seemed to be the next best thing you could play and use some creative energy. We were living in East Cakland, it was like a breeding ground for all kinds of funk that were coming out of California at the time. I got to do a lot of it."

The Jackson and Clarke team auditioned for Herbie Hancock just after the best selling Headhunters album and got the job. Mike stayed for four years, playing on Thrust, Flood, Man Child and a couple of other albums that he can't remember. "I still had a great love of jazz, I wanted to play jazz or something I could get creative on," says Mike, "So I went to work with Eddie Henderson for about a year and played with a few cats like Phároah Sanders, David Liebman and Julian Priester."

He got together his own band but found work difficult to come by, and teamed up with British born organist Brian Auger. His association with Brand X began shortly after he played on a few record dates with Peter Robinson, when he was invited to play on the *Product* album.

Mike's drum kit is Gretsch, consisting of 24-inch bass drum, 8×12 and 9×12 mounted toms, 14'', 16'' and 18'' floor toms, a deep Ludwig snare, K. Zildjian 22'' ride cymbal, A. Zildjian 18'' cresh, and sometimes another 18'' or 20''. A. Zildjian crash and at other times a big Chinese cymbal.

Why Gretsch? "They just have a certain sound," he says. "I can't explain, a certain ring to them that I like, and I can really hear the separation in between the different drums." Drummers that have influenced Clarke include Elvin Jones, Art Blakey and Philly Jo Jones. But there are only two drummers that "I really love in the universe and they are Tony Williams and Alphonse Mouzon. What Alphonse did with McCoy Tyner I thought was the most amazing drumming I'd ever heard in my life, and some of the most amazing music as well."

TOP LINE BACK LINE

Carlsbro offer the professional musician a new high in backline power performance, quality and technological sophistication.

Ouite simply they are the finest amplifiers of their type on the market.

LED status indicators which show you immediately which modes you have selected, two types of sustain, digital channel switching for greater control and a remote foot switch for the ultimate in out front control are just a few of the features you'll appreciate.

1 pro-0000

The Carlsbro Stingray Lead 150 provides power plus. The amp module was recently rated by International Musician and Recording World as giving around 180 watts. This output is complemented by the extremely advanced tone control circuit Parametric equalisation of channel one means players can tightly shape their sound and accutronic reverb is selectable on either

The highly advanced 150 watt Stingray Bass is designed to solve those difficult bass amplification problems without huge racks of amps. Available in both amp only and combo forms, the Stingray has unique Carlsbro 'Band Pass Filters' for instant selection of a particular sound. Wide ranging tone controls allow you to shape your own Carlsbro sound perfectly.

Add the superbly-made, hard wearing cases, protected by tough aluminium extrusions, see-through, kick-proof speaker grills and ruthlessly stringent testing and you have some of the reliable reasons why Carlsbro backline



For more information on our Back Line range, please contact. Carlsbro Sales Ltd., Lowmoor Road Industrial Estate Kirkby-in-Ashfield, Notts., U.K. Tel: 0623-753902. Telex: 377472.



SPECIAL SUMMER SALE

Ibanez



ARTIST AR100 AV, BK

Maple carved top with Mahogany Body, Maple Neck, Antique Violin or Black Finishes, Stylish Head and Tailpiece



ARTIST AR300 AV, BK

Two Super 80 Tri-Sound Pickups, 22 Velvetouch Frets, Smooth Neck Heel Design, Pearloid square inlaid Fingerboard



MUSICIAN 900 AV, DS, NT

Innovative Electric bass design, Versatile EQ-B

design, Versatile EQ-B Tone System, Two Super 4 Bass Pickups, Ash Mahoganv combination Body, Straight Thru Rock Maple/Walnut Neck



ARTWOOD AW20 ACOUSTIC

Select solid Sitta Spruce Tops, Hand-shaped Scalloped Bracing, Mahogany Back and Sides, New design Scratch Plate, Chrome Velvetune 18:1 ration Heads

Our special summer price £118.88 £155.00 £187.50 £70.00

Not available for export — Nicht erhältlich für Export

These super summer prices are available only while stocks last.



LONDON GUITAR CENTRE

LONDON: 88 Chalton Street, (off Euston Road), London NW1. Tel: 01·388 4094 MANCHESTER: 58 Oldham Street, (off Piccadilly), Manchester 4. Tel: 061·236 6794

TAMA

SPECIAL SUMMER OFFER

£286.70



All Tama drums available at special offer while stocks last.



GUILD SOLID ELECTRICS Example S-300D

Mahogany Solid Body, Wide Fingerboard, Twin DiMarzio PAF Pickups, Guild No 10 Adjustamatic Bridge, Solid Brass Tailpiece. RRP £419.75

£209.90

Special summer offer, all Guild guitars available at special summer price while stocks last.

DOUBLE

ARIA "Herb Ellis" model £369.00 (inc.VAT and case)

If two guitarists meet and start talking about jazz, there is a good chance they are each talking about different kinds of music. The types of guitar traditionally associated with various kinds of jazz are also subject to the same kind of confusion. If we take for example, a Gibson L5, or an Epiphone Emperor, many of the old school of players would reject the description "jazzguitar" for these instruments and insist (quite correctly) that they are plectrum guitars.

On the other hand, many younger players would describe them loosely as jazz guitars on the empirical base that jazz is what people usually play on them. From their point of view, it is just as valid a description. We are not out of the woods yet, because there

are various opinions on the exact meaning and applications of the word jazz itself. However, if my friend Val will forgive me, I am going to sidestep that one for the moment, and plough on with this month's guitar reviews.

Most of the old school of jazz guitar players already have nice old arch-top plectrum quitars and they are not likely to be interested in modern instruments. However, for those young rockers who secretly aspire to becoming old jazzers, here are a couple of interesting and very different instruments. If it be possible without opening up Pandora's box into the Letters page, I should like to call them both "jazz guitars".

The first one of the pair is the Aria Herb Ellis model. As Aria have very honestly proclaimed, "Herb Ellis did not design this guitar, he just gave it a good name" - or something like that. Well it is a good name. Mr Ellis is an impressive and tasteful player, he has been around for long enough, and he ought to know a good guitar when he sees one. So what has he put his name to?

Aria's Herb Ellis guitar, which is also labelled "Aria Pro II" across the head and the tailpiece, is a medium-sized, arch-top guitar with f-holes, two pickups, a single cutaway and a pearl-inlaid ebony fingerboard. The pearl inlay may not reproduce very well in the accompanying photo, but the pieces are well matched and nicely figured, and the inlay work is almost impossible to fault, even on close inspection.

This is not the usual sort of job, with oversize inlay holes and plenty of black epoxy filler: this pearl actually fits. The fingerboard is good quality, straight-grained ebony, with slightly scruffy plastic bindings and nicely shaped frets of medium width. The machine heads are gold-finished Japanese Schaller-copies. As machine heads, they work wellenough, but it is a pity that they should look so much like the German machines. There are plenty of other possible shapes for machine head buttons. By now, Aria are big enough and prestigious enough, that they have no need to be playing about with 'look-alike" copies.

Although many guitars now

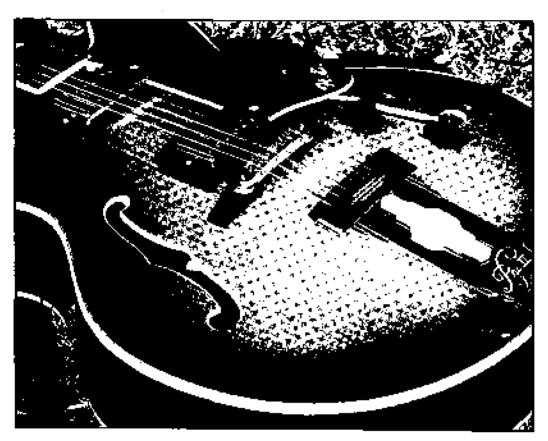
have brass or Micarta nuts, this one has a nut made from bleached bone. This material has similar properties to ivory. and should please both the traditionalists and the elephants. There are two sorts of truss-rod used in Japanese necks. One has a screwed rod running in an aluminium channel. The other has a screwed rod set directly into the neck and works the same way as truss rods in Gibsons, Fenders, Guilds, and others. I think it is preferable, for several reasons, and it is this "American-style" trus rod system which is used in the Herb Ellis Aria. It is said to give a better sustain and it certainly works in a more predictable manner.

As some jazz guitar players are likely to use rather heavy strings, it is a wise choice for this particular guitar. The neck is made from Luan, or something rather similar, and the body is made from laminated maple or possibly birch wood. Most of the body strength seems to come from the arched shape of the front and back, as the only bracing visible inside is a curiously-shaped "pillar" from front to back, just behind the bridge. The two gold-plated humbucking pickups and the usual selector switch and controls are fitted directly to the body.

The bridge has a wooden base to fit the arched front of the guitar, with a die-cast metal top section having the usual electric guitar bridge intonation adjustments. The tailpiece is modelled after a similar Gibson tailpiece and retains this unit's odd adjustable brace between the underside of the tailpiece and the edge of the guitar front. I believe this was supposed to adjust the down pressure on the bridge. but as I have yet to find an "original" of this kind which was working properly, I cannot fairly comment on the working of the "copy". If anything, it is likely to work better on the hard laminated front of this Aria than on the relatively soft front of the original Gibson

The whole guitar is finished in yellow/brown/black sunburst and a hard clear gloss lacquer. F-holes and body edges are neatly bound with plastic trim and the whole guitar has a very clean and





straightforward appearance.

The neck on our sample guitar is quite straight, and will accept a low action without problems. I found that the guitar works quite happily with either medium or light strings, without needing any truss rod adjustments. (Another advantage of the "American-style" truss rod, when correctly fitted into a good neck.) The string action as supplied, at nut and bridge is a good general purpose compromise, which should suit most players. Recent converts from solid electric guitar might like the strings a little lower at the nut. Some of the older players I have met would prefer them a bit higher above the frets at the nut end and perhaps a bit lower at the bridge end. This would produce similar twelfth fret action measurements but a totally different feel in each case. Twelfth fret measurements are a useful guide, but they are not the whole story. There is a tendency for strings to creak as as they pass over the nut, but I think you all know the cure for that, by now.

At the time of review, the nearest guitar I had available for direct comparison, was an old Gibson Switchmaster, with three pickups, but otherwise of roughly similar construction.

Both quitars would feed back if placed too near to the amp, and at almost identical notes (around middle E on the D-string). In both cases, feedback could be controlled, but not eliminated, by covering the f-holes with gaffer tape, or filling the guitar body with wellteazed-out Terylene fluff. This problem has not prevented Steve Howe from using a Switchmaster in the past. It is probably one of those things which is worse in theory than in practice.

The voicing of the pickups on the Aria was brighter and more "open" than on the Gibson, although there was little apparent difference in output level, it was noticeable that this guitar, a full, hollow bodied, electric/acoustic, had rather more "poke" than one particular make of American solid-body guitar, widely advertised on the basis of the unusually high output and agressive sound of its pickups. It may be that Aria have chosen these pickups with the needs and tastes of rock guitarists in mind.

Conclusion

Overall, this is a nice and not too fancy looking guitar, with a very attractive fingerboard, inlaid in the old style. It balances well, feels comfortable to play over long periods, and was supplied well adjusted, with good quality fittings. The sound is a bit more mellow than many solid guitars, but it can certainly hold its own if you are worried about pickup output levels.

Almost any guitar of this type will produce some feed-back if you stand too close to the amp. Gaffer tape over the holes, fluff inside the body, and possibly a small graphic equaliser with one of the middle sliders pulled well down, seem to keep the problem under control in practical playing conditions. You may need none of them, or all three, depending on how, and where, you play.

Aria Herb Ellis Model
Serial No: 088024
Price: €369.20 (inc. VAT
and case)
Source/Importer: Gigsville, UK
Scale length: 629mm
String spacing at bridge: 55mm
Fingerboard width at nut: 43mm
String spacing at nut: 36mm
Depth of neck at fret 1: 20mm
Depth of neck at fret 10: 27mm
Action as supplied. 1.3mm treble/
2.2mm bass

Lowest recommended action: 1.5mm treble/2.5mm bass 20 frets on fingerboard/body joins at fret 17 on treble side. Body depth at waist 85mm. Heel starts around frets 9/10.

Stephen Delft is a maker and repairer of guitars and other instruments, and a member of the Institute of Musical Instrument Technology. He is also a more than capable performer on the guitar.

GUITARCHECK

JOHN LEVOI Smallsoundhole "Mac"model £600 approx.

The second guitar of this pair is a very nice hand-made acoustic, by John Levoi, based on the Macaferri model with a small oval soundhole (rather than the more often seen version with the large D-shaped soundhole.) This instrument incorporates the unusual, centrally arched soundboard, found in real Macaferri guitars, but not in some of the modern replicas.

John had the good fortune to find a Macaferri guitar which had come to pieces from damage and neglect, and I had the good sense to photograph the inside of it in considerable detail, before it was put back together. Although there was much external damage, the inside showed clearly the method of construction and assembly of the parts.

When I met Mario Macaferri at the London Music Trade Fair a few years ago, he said that in his opinion, the important part of old Macaferri guitars was the soundboard construction, not the more interesting-looking internal sound chamber. Well, he designed those guitars and he ought to know which bits are more important and which bits, less so. Later experiments in making similar guitars with the "correct" soundboard, but without sound chambers or baffles, would seem to confirm

this point. Not all Mac's had these internal fittings anyway, and the situation is further confused by some old instruments which have had parts added or removed at a later date.

The Levoi version has a mahogany neck, ebony fingerboard and bridge, rosewood tailpiece, imbuiya back and sides, and an attractive figured spruce front. Some of these features may need a little more explanation. The neck has a slotted head and appropriate Schaller machines, with decorated chrome plates and "pearl" buttons. There is a rosewood facing on the front of the head, matching the colour of the tailpiece facing.

There does not appear to be any adjustable truss rod, but the neck is so rigid that it must have adequate steel reinforcement built in. Surprisingly, this has not made the instrument feel neck-heavy. The finger-board is simple enough: it is good ebony, fairly wide, with a moderate camber and smoothly finished low, wide frets.

The bridge is the usual kind for this type of guitar, but you may not have seen one before. It is made of ebony, in three pieces. The two pointed end pieces are glued to the front, while the centre part is carved to fit exactly onto the guitar front, but left free to move. It is held in place by string downpressure. The separate centre section allows for some adjustment to string intonation and also provides some decoupling, allowing the centre part to vibrate partly by itself and partly with the end pieces and therefore with a larger area of soundboard.

In addition to the possible movement of the centre bridge section, for intonation adjustment, its top edge is carved into a staggered shape to approximate the different bridge positions required by each string in the set. As supplied, the guitar was fitted with Guild light bronze, or something similar, and all the strings played acceptably in tune at the twelfth fret.

The tailpiece appears to be made from two thin slabs of rosewood, with the strings fitted into small holes and pockets carved into the wood.

In fact there is a metal plate set into the underside of the rosewood pieces, which continues round the edge of the soundboard and is screwed to the bottom end of the guitar in the usual way. A neat and attractive solution.

The back and sides are made from a South American wood called imbuivia, which is slowly gained popularity among instrument makers. It is generally a dark amber colour, with a variety of figuring, but it is rare to find enough similar pieces of wood for making two guitars the same. Each one is different in appearance, which is fine for individual makers, but difficult for larger companies who need to prepare representative catalogue pictures. Two guitars made from opposite ends of the same board may be patterned like a striped cat, in one case and a black and white cow, in the other.

This instrument has a medium brown colour, with a figuring on the back which looks like puckered silk. The spruce soundboard, on the other hand, looks like smooth silk which has been gently folded.

Altogether, it is a very attractive guitar, it is accurately made, it feels good to play and is so pretty, it would be a shame to leave it in its case. It is the sort of guitar I would prefer to hang up on the wall, where it can be seen. The tone is perhaps a little more full than the similar Macaferri original, and slightly less percussive. This may be an advantage, unless you particularly want to sound exactly like old recordings. The tone is loud and pleasant, and the volume and sustain-times of the individual strings well balanced.

Stephen Delft

Levoi "Macaferri" model Serial No: "Made May 1980" Price: around £600 Source/maker: John Levoi, Alford, Lincs Scale length: 642mm String spacing at bridge: 59mm Fingerboard width at nut: 44mm

String spacing at nut: 36.5mm
Depth of neck at fret 1: 22.5mm
Depth of neck at fret 10: 26.5mm
Action as supplied: 1.9mm treble/
2.2mm bass

19 frets on fingerboard/body joins at fret 14 on treble side. Body depth at waist 100mm. Heel starts around frets 9/10.





never be the same again. Mr. Twang imports directly, in bulk, bringing you massive savings on many exciting new names in international music equipment. Mr. Twang's huge buying power also means big savings on leading names also. Mr. Twang dealers also have credit and part exchange facilities. Look for your nearest Mr. Twang Dealer-He stocks more. For less.

CASH OR CREDIT DEALS ON FENDER, RODGERS, RHODES. YOUR NEAREST DEALER.

YAMAHA SYNTHS-PIANOS from £199 HOHNER CLAVINET PIANET DUO reduced

from £710 to £399

DIRECT IMPORT DEAL!! 5 piece drum kits (complete with fittings) only £295

Bernaley: Kitchens of Barnsley, 33 Peel Street. Tel: 0226 5867. Bedford: Mr. Music, Bromham Road, Tel. 0234 50861.
Belfast M. Crymble Ltd., Dublin Road, Tel: 0232 26818. Bradford: Kitchens of Bradford, 26 North Parada Tel: 0274 23577

Cardiff: Sound Centre, 9 St. John's Square, Tel: 0222 34018. Hernel Hempstead: Mr. Music, 24 Bridge Street. Tel: 0442 61812.

Huddersfield: Kitchens of Huddersfield, 5-7 Market Avenue. Tel. 0484-26508

Kent Unisound, 48 High Street, Chatham. Tel: 0634 44068. Leeds: Kitchens of Leeds, 26 Queen Victoria Street Tel: 0532 446341

Liverpool: Hessy's, 62 Stanley Street. Tel: 051-2361 418. Landon NW6: Unisound, 213 Kilburn High Road.

Newcastle Upon Tyne: Kitchens of Newcastle, Higham House, New Bridge St. Tel: 0632 22965

Newport Sound Centre, 107 Commercial Street Tel 0633 66814



BULK BUYING POWER!



The warm timbre and wide range of Elkie Brooks' voice has subtleties which demand a microphone that can respond clearly an smoothly right through the sound spectrum

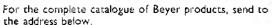
The highest highs and lowest lows picked up perfectly by the Beyer Dynam Soundstar microphone.

It's an all-purpose, unidirectional microphone with a universal ability. Whatever the concert hall, the size of the audier and the type of singer, it will project the individual sound without projecting other noises in the auditorium.

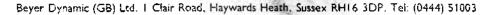
The Soundstar is also remarkab edback problems, another free of feedback sult of dedicated Beyer microphone

which has been around for nearly 80 years.

Like so many other top stars of today, the immense appeal of the Elkie Brooks style is fully complemented by the unifersal versatility and popularity of the leyer Dynamic and popularity of the



Circle 764 on Reader Service Card





Revolutionary Combination of Strings and Polyphonic Synthesizer in One Performance Oriented Keyboard.

The KORG ⊿ (Delta) is a strikingly flexible and versatile polyphonic synthesizer incorporating quality string synthesis. The polyphonic synthesizer allows widest creation of tone colors through completely free mixing of 16' 8', 4', 2', and white noise while these sources, combined with the newly developed, ultra-efficlent VCF circuitry (roll-off, 24dB/OCT), provide optimum creative flexibility. Further, addition of a keyboard follower has eliminated unnatural alteration of tone colors at the keyboard.

Extremely realistic strings sounds follow in the tradition of KORG's PE-2000 and

KORG

A(Lambda) units. Simple manipulation of a joy-stick enables performer to alter tone color by pitch-bending polyphonic synthesizer and strings or by changing vibrato depth.

Wide combination of jacks allows separate output of polyphonic synthesizer and strings sounds and/or amplification through separate amps. Trigger input/output jacks and VCF fcM IN-jack also lets you connect other synthesizers or rhythm machines such as KR-55 for even greater versatility.

Ask for a demonstration at your nearest

For details, please ask:
CANADA: ERIKSON MUSIC REG'D 7750 Route Transcanadienne,
StLaurent, Qué. H4T 145.
FRANCE: GAMME 17. Riue Laperouse, 93500 Pantin.
GERMANY: GOTTHOLD MEYER KG. 3550 Marburg 1.
HOLLAND: MILESTONE B IV. Posibus 207, 3330 AE Zwijndrecht.
17ALY: CGD MESSAGGERIE MUSICALI SPA via M.F. Guintiliano,
40. 20138 Millano.

SWITZERLAND: MUSIK-MEYER AG. Musikinstrumente en gros.

Mühlehaldenstrasse 16 8953 Dietlikon. U.K. and BIRE: ROSE MORRIS & CO., LTD. 32, Gordon House Road.

London NW5 1NE U.S.A.: UNICORD 89 Frost Street, Wastbury, New York, N.Y. 11590,



SOUNDCHECK

The WEM Soundman JB-100 Amplifier £268 inc VAT

The Soundman JB-100 amplifier is a five-channel and 10 input designed multi-purpose system, which is claimed to deliver acoustic power levels of about 145 watts into 4 ohms of speaker load. The amp comes from WEM, a well-known London based firm and retails at around £245 which includes VAT. The range of applications of multi-input amplification systems such as this one ranges from small PA installations, club-type work to stage keyboard amplification rigs and so on. Obviously, when buying this sort of gear combining both mixer and power amp functions, one cannot expect to get everything normally found in 10-channel mixers and in power slave amplifiers.

At the same time, however, the JB-100 offers a number of useful features such as: compact size, reduction in number of connection leads, short installation time, plus flexibility in use. The JB-100 package, in fact, offers quite a few things together, for example - sixband graphic EQ, built in reverberation unit, remote echo/effects operations, patching facilities, channel reverb LED indicators, reverb tone control and above all the capacity around the 10 jacks to plug in mikes, connect speakers and power leads and then forget about them.

Construction

The Soundman JB-100 is a universal amplification system designed for both semiprofessional and professional use. The electronic circuit connectors and controls on one hand, and the cosmetics on the other, have been kept at a minimum for simplicity of operation, and overall economy, All channel/master type controls of the JB-100 are located on the front panel, while the power outlet, external fuse holder, power on/off switch and main IEC socket are on the rear.

- Five-channel control boxes incorporating volume, treble, bass potentiometers and a reverb on/off push button with an associated red LED indicator.
- Five-channel input boxes provided with two ¼ inchequal priority jacks allowing a total of 10 audio signals to be plugged into the system.
- Graphic equaliser placed on more or less the central part of the panel and containing six slide potentiometers, calibrated at 150Hz; 300Hz; 600Hz; 1.2kHz and finally 1.5kHz ÷ 10kHz.

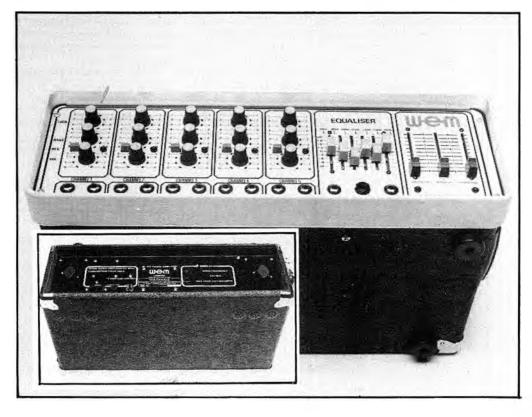
All sliders according to the legend printed on the panel should allow for symmetrical cut and boost up to +12dB, but I will come back to this later. Below the EQ section are

three ¼ inch jacks which serve as: slave in, ext. echo, and footswitch.

• Finally, the master section box has three controls only, ie master volume, reverb volume and reverb tone. All three are slide potentiometers marked zero to 10 and the pair of LEDs mounted below them act as power indicators.

A couple of remarks while we are still talking of the front panel. The amp's fascia is made of brushed aluminium with all lettering in black matt except for one - the WEM emblem which is, and always has been, red. The majority of front panel controls seem to be of a reasonable quality, but what I did not like were the sliders - which are fitted without the usual dust protection slaves above the slider inside the casing. The delicate carbon track can be seen from the outside which means that dust and moisture penetration is certainly a possibility.

Turning to the inside of the JB-100 — the access is extremely easy by just removing four Philips screws. The first thing you see is a neatly designed output stage/power supply module built around the rear panel which also acts as a heatsink for one pair of popular 2N 2773 silicon transistors. The power amp PCB incorporates a driver and invertor circuitry.



and this stage is designed with a built in short circuit protection feature.

The power supply is like most similar constructions not stabilised, with huge smoothing capacitors of 2 × 4700gF (Lorlin) and the whole module is connected to the rest of the amp via a single white nylon rectangular six-pin socket. The input to the power module uses a screened cable for improved noise performance. Last but not least, the two 2N 2773 devices use a special snap on TO-3 socket and are covered from the outside by a black plastic cup for safety reasons. As mentioned earlier, the JB-100 has a builtin reverb effect, which happens to be our well-known Hammond-Accutronics model 4FB2AIC and is fitted in the central part of the enclosure ie between the power amp module and just behind the motherboard PCB, housing all the pre-amp circuitry, EQ controls etc.

The enclosure of the amps is made of chipboard coated with traditional black resin, incorporating 12 ventilation ducts set symmetrically in groups of three for air circulation.

Conclusion

The Soundman model JB-100 by WEM is a relatively simple and straightforward amplification system, very easy to use and it really takes only a few minutes for the complete system to be set-up, in order to get it fully operational. As WEM are not provide any owner's literature, we tried our "blind" test, the amp was given to a person with a broad musical experience and very little on the technical side. He managed to set up and connect the system in just under 10 minutes, which just proves my point concerning simplicity. I feel that the JB-100 could be specially useful for small bands who can't afford to have a separate sound engineer and have to operate their own small PA.

One remark at this point is that it seems to be worthwhile to have a "middle" control in the tone correction stage, however, the graphic EQ covers this range (bands 2 & 3). The reverb on/off control is the only living reverb authority as far as channel control is

concerned which means that the channel reverb level control is non existent, and you can get full reverb or none — the choice is yours.

A good thing is the reverb tone correction, which is obviously a very useful feature.

A couple of comments on the functional side of the machine. As you can see from the specification table enclosed, the first five bands in the Graphic EQ are specified with +10dB of boost/cut, our measured figures are given in the results column for you to compare. Remember, the slight difference does not mean that anything is necessarily wrong, as the accuracy of the "centre" frequencies are only as good as the tolerance of the components used, and in most cases precise tuning does not take place.

What I cannot understand is the reason why WEM calibrated the front panel graphic EQ controls at +12dB which does not make much sense. Apart from this the majority of figures match the manufacturer's spec, wherever specified, as we really got very little from them. Pity.

The power measured at onset of clipping was just above 130 Watts into 4 ohms and this level should be specified by WEM in their specs, rather than 145 watts.

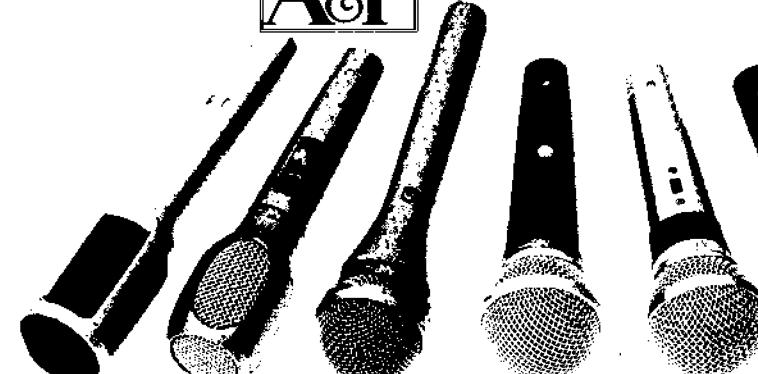
Summing up, the JB-100 is a real value for money product, with one or two simplications but the function and content value is still very high.

Mark Sawicki

Parameter	Result	Test Condition	Comments
Specific Power Outout	132.25WRMS 72.09WRMS	Onset of croping /4 ohms (1KHz) Onset of clipping /8 ohms	WEM spec claims the adver or top to 11 45 Water's 4 chms load, however the sec condition not started. Our results correspond to anset of chipping level + indicate approx. 132W RMS (4 ehms) and 72 Water (8 ehms). The manufacturer recommends total speaker impedience of 4 churs, as with 8 ehms. Loads corresponding power level reduction of about 45.5% to observed.
Total Hamon-c Dissertion (% ₹*D)	D.05% @ Q.038% @ Q.028% @ Q.pax @ Q.pax @ D.042% @ D.042% @ D.031% @	130 Werns 100 Werns 80 Werns 50 Werns 15 Werns 10 Werns 5 Werns	Good, Quite hypical larvols and characters of Hallmonic Distorrighs for the stype of amplifer. The minimum TRD level cor- responds to about 80 Wasss 46 chms) power output. The quartry of sound of this ampli- can be regarded as savidactory. The TMD test was carried out with Reverb OPP. 170-FLAT Ed section OPF. Masser Youtme @ 8.
Input sensitivity in mVRMS for 100 West RMS (22 B OVAMS) QUE TO SO VAN FOR THE PARTY OF THE PARTY IN T	14 32 mvrahis 14 51 mvrams	Input 1 B knowt 2— Channel 1 mags: uterment only, 4 obms dummy load applied Reverb Off, TTC 148, EQ section FLAT basses Volume @ 8- Matsured dig. Tally using San- gamp-Vessivan model 6000 Digital Multimater,	Both input 162 are practically of equal sensitivity and quite double to specified a model of the control of the common Valume and tone controls. When using miles, similar or even identical types a model of the common Valume and tone controls. When using miles, similar or even identical types should be used on individual channels for best results.
Signal/Noise Ratio	69. 40d6	Tribb/Bass controls set flat: EQ OFF Ref 130 Watt out- out use 4 ohths durrenty load.	Could be better. Unweighted and true RMS reading on ANNE Red lord noise meter with reference to power (seek at 130 Wests 122.8 OVRMS)
Tone Controls Rang± (Swing in dBI	22.8dB = swing 24.2dB = swing	Treble ∰ 16KHz, Bøss-Flat, 60 – FLAT Bass ∰ 26Hz, Treb-Nat, 60 - Flat	Satisfactory. Nice and symmetrical tone correction mattern is used. Specified 15KHz responses with EO in Pat position — Sold: 4498 644, 100 KHz. Fat PA work channel "imiddle" colored could be very useful, however graphic covers this range.
O≀aphic Equeliser	21.2d8-swing ind8 18.7 ** 17.6 ** 17.4 ** 9.5 **	and 1(0)150H; Rel. Dnds. 2,3,4,5, 6, fiel had 2(0) 900H; Rel. Dnds. 1,3,4,5, 6, Fiel bad 3(0)600H; Rel. Dnds. 1,2,4,5, 6, Fiel bad 4(0)12KH; Rel. Dnds. 1,2,3,5, 6, Fiel brd. 5(0)2 4KH; Rel. Dnd 1,2,3,4,5, Fiel brd. 5(0)2 4KH; Rel. Dnd 1,2,3,4,5, Fiel	WEM Figures are as follows. **Nod8 @ 150Haz** - 1006 @ 500Ha **10d8 @ 060Haz** - 10d8 @ 1.2KHa **For the last band specification claims **7d8, "3d8 @ 8KHz. Bands 3.4.5, should have salphy more 'range'. The 'rero' level on the studens chicks into place. The calibration of the controls is 0, -3, -6, +9, -12 which is obviously a little bit too asymmetric even for specified liquies.
Reverberation. Echo	GK	Internal Rayerber atton/Eat Echo switchable to each channel	Red LED Reverb provided in each channel Master type volume and Tone side potentiometers used for overall Channel fleverb central.
Çapacırance Logd Tesr	Ок	2 microferads non-electrotytic capacitor and 4 ohms dummy load applied.	Acceptable
Open Circuit Stablidy Test	ðк	dumwy load emuyed, all five channels volume @ 8. Master Volume control @ 10. T/C, Flat EQ- OFF.	Good stability margin prov- ing that the amp should operate statistically with most typical load conditions
Short groun Test	20 seconds	Full drive into 4 ghmà. Re[_1KH ₂	WEM claim that the power amp rection is short execut protected. No selections when a second control of the selection is selected to the selection of the selection is selected.



GIVE YOUR VOICE A CHOICE WITH MICROPHONES



MC-70TD

this a very versatile model.

€44.60

This is the top quality model in the A&F A uniquely designed vocal microphone for Electret condenser microphone with flat. This microphone is an up-market version needed:

microphone range. The flat frequency professional use with superior transient frequency response and superior of the MC-35SD. It has superior cutresponse combined with the fine tonal properties. The sturdy construction pro- characteristics to prevent overloading and through and tonal qualities. Its wide qualities of this microphone make it ideal vides higher resistance to mechanical pop noise. Recommended for miking-up dynamic range make this microphone very work. for us in all vocal and instrumental applica- shock and it is suitable for miking up drums pianos, stringed instruments, drums etc. suitable for recording purposes and for £29.40 tions. A built-in tone selector switch makes and other on-stage applications where Built-in tone and impedance switches conditions where extra clarity is required. mechanically strong microphones are makes this a very good multi-purpose £31,20

MC-38SD

MC-35SD

A really good, all round microphone pro- Another good, all-purpose microphone recommended for all stage and studio

MC-30SD

ducing a good natural vocal quality, with very clear reproduction in the mid range area, with low pop noise and low handling noise characteristics

MC-20SD

Lightweight, high quality microphone with bright and clear tonal qualities. This model gives good clarity for vocalists and instrumetalists plus a very wide frequency

ALL MIC'S SUPPLIED WITH CLIP, CASE, **CABLE AND JACKPLUG**

CICSVILLED

South Drive, Phoenix Way, Heston, Middx. Tel: (01) 897 3792

CHECK OUT AST MIC'S **AT YOUR** DEALER DEALER

TO GIGSVILLE	 A&F Brochure
NAME	
ADDRESS	

SYNTHCHECK

LOGAN Vocal Synth £2,485 incVAT

This machine has nothing to do with vocoders or Mellotrons - it really is a unique instrument that attempts to reproduce the effect of a large choir singing in four-part harmony. Its price reflects the amount of new design technology and circuitry it contains, for this is not just a singing keyboard. It has a comprehensive three-oscillator monophonic synthesizer that includes solo and polyphonic presets. And to complete the line-up comes a string machine that converts to "church" organ, plus electric piano and harpsichord. A split keyboard allows different blends of these instrumental/vocal groups and a built-in mixer gives separate panning of each section in stereo.

Quite some instrument at first glance, this one — and like several multi-layer preset machines, gets "better" to play as you learn to use it. Some unusual features too, which might tempt you one way or the other into buying the Vocal Synth.

Construction

The instrument is housed in a large sturdy case finished in standard Logan fashion with black vinyl covering and plastic corner protectors. One carrying handle is provided, although the cabinet really needs two people to lift it without pulling your back out. The case is wider than most, measuring 40 ½" long, 21 ½" high and 13" wide.

A chrome stand comes in a smart black leatherette case and screws together easily to support the instrument. Once the large retaining knobs are fastened at each end of the stand to the cabinet it is possible to tilt the instrument backward or forward for best playing position. This feature is useful, for the control panel is set at two angles and tilting the cabinet forward slightly enables the top controls to be seen more clearly. With the cabinet level the keyboard stands 30" off the floor.

All the connections are grouped on the rear panel of the cabinet, with a detachable mains lead, fuse, illuminated AC power switch and standard jack sockets for left and right "stereo" outputs and a straight mono mix output. A separate foot pedal also plugs in here



for controlling overall volume and piano sustain.

Lifting the complete front keyboard and control panel reveals the main circuitry in one "computer" bus-board set up plus a very big power supply. Underneath the keyboard are reliable single contacts for producing the note-pitches and over the control panel area is the mass of wiring and components for the synth section and control panel switching. The main "computer" pack has no less than 11 filter boards holding over 36 ICs on each plus another seven boards with a lot more chips for producing piano, string, organ tone and sound shaping. This daunting component count might lead you to suspect that some instability would arise in continued use. I can only say that I have been using the instrument for over a month with no trouble except for some distortion on a couple of presets due to incorrect setting up and some initial tuning drift which surprisingly cured itself after a few hours use.

The control panel consists of an upper section lying nearly horizontal and a vertical sloping lower section. The single keyboard manual is split into two parts - the lower section ranges over two octaves (F to E) and has its own slider controls for piano and harpsichord, strings or organ, and SATB voices. The right hand section of the keyboard covers three octaves, having an additional octave that goes below the left hand section. This seems most unusual at first, for two-hand organ style playing has to be done on this top part of the keyboard in order to get that lower octave. Accompanying middle and high range chords can be added on the LH section slider presets to add choral and instrumental sounds against the upper section. The right hand part of the keyboard has the same sounds as the left, but uses its own set of controls so that different textures can be obtained by using alternate ends.

I must admit this control panel was not what I expected — having imagined that the vast array of controls was for making glorious choral sounds, I found that all the upper section sliders and pushbuttons were in fact for a mono/poly synth that works on the upper half of the keyboard.

The basic choral sound is preset and is selected from a mixer section located in the middle of the upper panel between the synth controls. There are pushbuttons for choosing piano, strings, voices or synth, separately or together. Strings can be converted to a rich church organ sound at the touch of another button and three different vowel sounds can be selected for the voices. Four sliders give left-to-right output panning of these sections and a main volume slider is also provided, plus a couple of holes for screwdriver adjustment of output impedance and overall pitch. All the sliders are coloured bright red, yellow or blue with chrome and red pushbuttons. The panel itself is of black coated metal with clear white labelling.

Above the keyboard are three thin metallic strips that give pitchbend and vibrato delay control by touching the upper/middle or middle/lower strips with a finger. They are

SYNTHCHECK

close enough to be done by either hand during playing. The "pitched" effect is the most useful, giving an instant drop of up to a tone (using the depth control), finishing with a gradual rise back to the original note taking up to four seconds (set by the time-bend slider). The vibrato delay works on the synth section only.

Piano section

The left and right piano section each contain four sliders for mixing 16' 8' piano, honkytonk and harpsichord. The piano sound is a little woolly, with the characteristic piano sound envelope making it more like an electric than a traditional acoustic piano tone. Mixing the two pitches gives a good solo or arpeggio sound. Honky-tonk is the usual "piano with upper harmonics added", and harpsichord has the correct dry sound envelope but is not bright enough for my liking. Piano sustain is controllable from the panel or the foot pedal by tilting the foot against a side lever.

String section

A choice of violin or viola to blend together, with a rich phasing effect built in. Two further sliders control attack and sustain (or "release") times. Since control times are becoming more critical when choosing string machines, I will mention that attack simply takes the edge off and sustain gives up to four seconds decay after release of the note.

It's an acceptable string orchestra sound with quite a lot of high tone present on violin. When played on the right hand keyboard section, the viola makes a usable cello sound in the lower octave. Pressing a control button marked "organ", removes most of the phasing to give an impressive church organ effect that will add depth to any kind of music played on this instrument.

Voices

Well, this is the one you've been waiting for — I hope! It's not what you expect — that's for sure. This section gives a fascinating new sound that will make a choral backing reminiscent of Rick Wakeman's Journey to the Centre of the Earth. It is at its most convincing when used sparingly and

with frequent changes of Soprano, Alto, Tenor and Bass combinations. I like to change the vowel sounds as I play — there are A, O, and U sounds available. "A" is by far the best — you can even make the "Hallelujah" from Handel's Messiah by jiggling the buttons!

The bass voice has to be set quite low and works on the lowest note played. The other voices work on all notes. Bass can also have portamento from the synth section. Using the attack, accent and sustain controls gives some very interesting sound envelopes just like emphasizing a word when singing and its long release gives its own kind of sustained reverberation effect that is very good. The voice section also benefits from pitchbend, producing rising voices that slide up to a sudden accent. The unusual sound of the voices has been obtained by a lot of clever filtering in the circuitry and certainly provides a unique sound for the keyboard player to use.

Mono and poly synth

The top three octaves of the keyboard make use of all those controls across the top panel to bring in mono and poly synth sounds. The synth sections can either function in preset or free mode, with mono working on the top note played.

There are two polyphonic preset buttons selecting 16' or 8' brass. The 16' preset produced some distortion due to overloading the next stage, but was easily corrected internally. It does, however, make a point that progressively adding sections together can produce overload in the final output mixing stages, so levels need to be kept off maximum. These brass sounds are very good, with a characteristic oo-wah filtered tone, playing on up to seven notes at once (as do all sections on both halves of the keyboard, except mono synth). Monophonic presets are Guitar, Clarinet, Horn, Oboe and Violin which enable some pleasant contrast of solo melody against the piano, string and voice sections. You can press more than one button at once for some rather peculiar combinations and the LFO controls can operate on the presets.

In Free mode (at the press of a button), a versatile three-oscillator mono synth is available for creating your own solo sounds. The Poly switches over too, but just gives 16' and 8' pulse pitches with on/off organ touch, which is fed into the VCF and the VCA along with the three mono oscillators and a noise generator.

It would take me too long to explain all the permutations of sound obtainable from the mono synth controls so I will point out the most important features. The oscillators are neatly grouped, with the "Master Oscillator" selecting 32' 16', 8' or 4' pitch that can be sawtooth or squarewave. Oscillator 1 also has the same pitches and a tuning adjustment over more than an octave. Oscillator 2 is the same as Oscillator 1 but with 16', 8', 4' or 2' pitch choice. All three have control of the "duty cycle" (or pulsewidth) of the squarewave output, A "sync" button locks osc. 1 and 2 onto the pitch of the master oscillator enabling chords to be preset and quickly changed to unison. The noise generator gives a good white or pink signal and portamento can be set for the mono synth (and bass voices). The VCF is a lowpass type with ADSR controls "emphasis" and (or resonance) taking it into oscillation if needed. VCA also has ADSR sliders and "overall amount" and volume controls. Triggers can be single or multiple and a keyboard follower can be brought in to open the filter for balanced harmonics over the three octave key span.

The LFO section operates on the pitch of poly, mono and presets to give vibrato which can be delayed automatically or by using the keyboard strip. Oscillators 1 and 2 can be modulated by a squarewave, as well as a trianglewave, for obtaining rapid pitch jumps. Finally wah-wah and tremolo effects can be obtained by switching the LFO to the VCF and VCA. LFO speed can be over 100 cycles per second for buzzing ring modulator kind of effects.

Summary

The instrument is well made

internally, although the smoothness of the sliders varied on the panel. Despite the rather heavy weight of the cabinet, the stand was safe and rigid in use.

The sound of the Vocal Synth is, in a word, powerful and will provide a basic orchestral and choral backing for a group, with a good solo synth included as well. The mono synth alone is quite special because of its ability to make three-note chords in parallel from one note. The instrument can be played entirely on its own for the solo keyboard player, although I like to use a pedal board as well. It would be useful if the lower keyboard could be switched to give the instrument its full fiveoctave note range. The stereo facility is useful, not just for panning but for sending say, to the left for echo treatment and right for straight.

When this instrument first came out at Frankfurt last year, there were a lot of inquisitive onlookers including Rick Wakeman, Pink Floyd and Manfred Mann. Some terrific blends of sound can be obtained but settings of controls have to be learnt first. Sound output naturally has some hiss with all those ICs but the high signal output level overcomes this, I've heard a few instruments with better pianos or better strings but when considered as one machine there is a lot going for this one!

Mike Beecher

Mike Beecher is a musician and keyboard consultant. He composes and performs his own electronic music using multi-keyboards, in a style based on his wide experience of progressive jazz and classical music.



efficies e eck

MUTRON Vol-Wah and Bi-Phase

The Vol-Wah pedal is as the name suggests, a volume and wah-wah pedal. It is a mains operated unit with dimensions of 12 inches long by four inches wide. The power cable enters at the rear of the unit where there is also situated a power on/off slide and the input and output jack sockets.

The volume and wah functions are switched by two on/off foot switches which are positioned in front of the pedal and each has a red LED to show what has been selected. With this arrangement, it is possible to have both volume and wah at the same time, should you wish to do so. Situated on the right side of the case is a gain control in the form of a screw slotted rotary control. Set for minimum, the gain is approximately unity and increasing from there, making it easy to interface even with quite insensitive equipment. There is no signal through the pedal if the power is removed.

The pedal is pivoted about a third of the way from the heel position — under the arch of the foot — and it is a very comfortable action as well as being very mechanically smooth. As it is mains operated, it does not need to use the same system as battery units with their cogs turning rotary pots but instead uses a light system

— as the pedal descends, it increases the amount of light falling on the receiving assembly. So the only friction is that of the bearings and so a very smooth travel is possible.

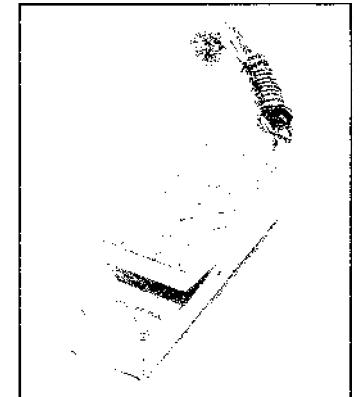
The length of the travel is also slightly more than most other wah-wah I have used, giving a greater degree of control over the sound. The construction of the casing is very solid as is the internal electronics.

The volume pedal has an action that spreads the volume gain equally over the travel, there being no "hot" or "dead" spots. The wah is quiet and also has a very smooth sound with a wide range. Operating the wah and volume together, adds a nice touch when the pedal is used to remove the attack from guitar notes as the timbre changes with the volume.

This pedal makes the battery operated units appear rather poor relatives but it is still fairly compact. If you have a requirement for a high quality wahwah and/or volume pedal, particularly for studio work, this is the one I recommend.

Keith Spencer-Allen

Sole Agents: London Synth Centre Price: £99.00 inc. VAT



Although it apears a complex effects unit at first glance, the Bi-phase is in fact simple to operate. Principally it is two separate phasing units with interconnecting electronics.

The cabinet is rather on the large side, 14 inches wide and 10½ inches deep. The front panel is angled and contains all the controls, while the underside of the cabinet has a threaded fitting enabling the cabinet to be mounted on a mike stand if so desired. There is a footpedal to switch the two phasing units on and off, connected by eight foot of cable and terminating in a five-pin locking DIN connector on the rear of the cabinet,

The controls can be divided into those relevant to the two sections. Phasor A and B. Phasor A has depth and feedback controls as well as a speed control for the sweep generator oscillator which may also be switched to pedal operation. The sweep may also be switched to pedal operation.

Phasor B has the identical controls to A — depth, feedback, sweep generator rate and generator waveform. This section has in addition an input selector—switch—to—enable Phasor B to process what is plugged into input B, input A or the output of phasor A. This enables the two phasing units to be run in series, parallel or as two separate units.

The interconnecting electronics also includes a switch for selecting the source of the sweep generator for Phasor B between the generator of B, generator of A or a pedal control. There is also a sweep sync reverse switch to invert the sweep on Phasor B. When this is inverted and the two sections are operated in a stereo mode, the effect is quite unique to this unit.

The Bi-Phase is mains operated with a fixed mains cable and an externally mounted fuse holder. The rear panel also contains the output jack sockets for the A and B sections while the input A and B jacks are on the front. There is no through signal unless the power is on and unless the footswitch is connected, the controls have no effect at all and the signal passes through untouched. Switching in the effect does not after the output

level at all.

Each of the two phasers are smooth sounding with the effect being quite subtle. With the units run in series, the output of A into input B, it is possible to double up and increase the degree of effect particularly when both phasers are being run from generator 1 and their sweep is in unison. With the generators set on different sweeps in this mode, I found the effect to be not very musically useful unless you are careful.

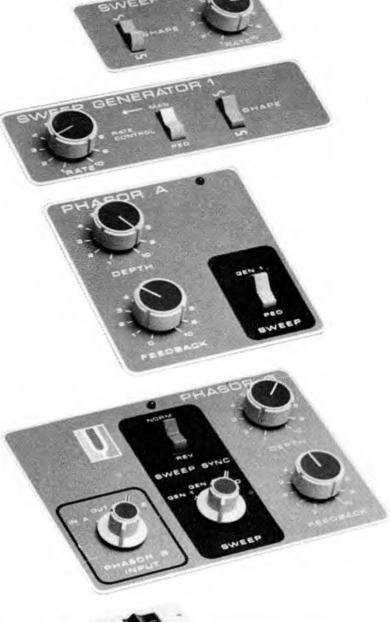
There was no instruction manual at all with the pedal as it was supplied but operationally it is fairly straight forward but I am puzzled as what it is all intended to be used for. The effect on a guitar is good but little that is not available at a lower price. I am informed that this unit is especially good however on a stereo keyboard such as a Fender piano when the sweep generators are working on opposite phases.

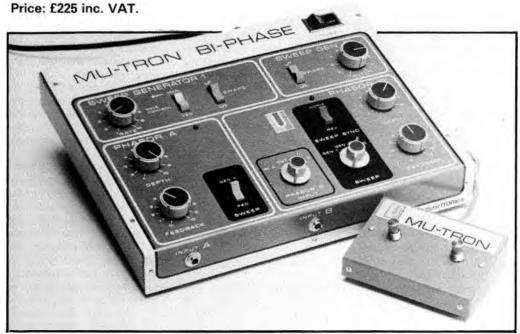
Summary

This is a well designed and built unit that functions extremely well but bearing in mind the price, I think that this must be a unit restricted to professionals who need the definitive stereo phasing unit for keyboards but I see little applications outide of this.

Keith Spencer-Allen

Available from: London Synth Centre





Compression Drivers-Discussion and Test procedures

Over the next two months we shall be taking our third look at the compression drive unit market since we started this Speakercheck project back in early 1978. In this, the first of three reports on this subject, we shall consider compression drivers in general and set out the testing procedure we shall adopt in the laboratory.

Since we last tested compression drive units - just about 12 months ago, there has been a lot of activity on the market with new products being introduced by several manufacturers, others making improvements to existing designs, and some changing over from Alnico type magnetic systems to ferrite based alternatives due to the escalation in the price of cobalt - an essential ingredient in the manufacture of the Alnico "slug".

So for one reason or another, we have quite a selection of units to test from most of the leading manufacturers, including Electrovoice, JBL, RCF, Emilar, Renkus-Heinz, Gohlion Industries, Fane, HH Acoustics, Peavey, etc. There is little point in re-testing products that have already been through the lab and so we will only be including new or redesigned drivers.

At one time or another, we will have tested and reviewed by far the majority of all drive units on the UK market and for products that we are not including this time round, reference to back issues of IMSRW for January, February, July and August, 1979 will provide information on some 30 more drivers.

Despite the widespread use of "bin and horn" PA systems these days — even by comparatively modest local bands, there remains a certain mystique in respect of compression drive units. Coupled with this is a reluctance on the part of many users to become involved with the technicalities of the animal and this is largely reflected by the inadequate specifications often published by manufacturers.

It seems that so long as

sound can be heard coming out of the horn, then it must be working, but there is far more to it than that. Prices for compression units range from under £20 to over £400 and within that vast variation in cost is an attendant variation in performance.

Where some of the cheaper units - and some of the notso-cheap units as well for that matter, generate a remarkably irregular and ragged frequency response characteristic at sensitivity levels which are not much better than those of a decent 15 inch cone loudspeaker, some of the more expensive units are coming up with ruler flat response curves to beyond 20kHz and incredibly high sensitivity figures in the order of 120dB for one watt input!

It stands to reason that a sound system fitted with the former type of unit will not even be in the same league as one fitted with the latter type in terms of clarity, accuracy and freedom from feedback — quite apart from the fact that a single driver of the more expensive professional type will do the work of up to 16 (yes, 16!) of the cheaper types and provide better quality into the bargain.

There are of course many applications - probably the greatest part of the market in fact, where smooth response and high sensitivity are not required, for example, when it is desired to extend the treble response of a guitar loudspeaker cabinet or smaller club PA or disco system and for these purposes the general purpose compression driver, fitted to one of the low cost glass fibre or moulded horns will do the job admirably at a total cost of under £60, horn included.

One of the aspects of adding a horn to a loudspeaker system that causes a lot of quite unnecessary hassle is that of crossover networks or filters. In the case of a larger, professional system, the chances are that the system will be bilor tri amped — i.e. two or three way electronic crossovers will be used, or else, one of the expensive proprietry professional

passive crossover networks which alone, cost more than a good quality compression driver.

The difference between a filter and a full crossover is that the filter will just prevent the damaging low frequencies from reaching the compression drive unit while still operating the bass driver as a full range loudspeaker, while a crossover will separate out the bass and treble components from the signal and feed only the bass to the cone driver and only the treble to the compression drive unit.

The difference in cost between these two arrangements is considerable and most commercially made speaker12dB/oct will in most cases be too sharp for a balanced sound.

Because most compression drivers are more sensitive than cone loudspeakers, it is usual to use two or more cone drivers to each horn and where this is not the case, it is usually necessary to fit some sort of attenuator between the filter and the compression unit terminals. A number of manufacturers are able to supply ready made filters - complete with built-in attentuators in some instances at very reasonable prices as listed: HH Electronics, Viking Way, Bar Hill, Cambridge, Richard Allen Radio Ltd., Bradford Road, Gomersal, Cleckheaton,



VITAVOX MUSIC MOTOR

cabinet-and-horn systems of moderate cost employ simple filters and not proper crossovers. A full crossover does offer many advantages from a performance aspect, but for most general purpose applications, a simple filter will be adequate, provided that the slope rate is sufficiently high.

The slope rate is the rate at which unwanted frequencies are removed from the compression drive unit and is usually expressed as being so many dB's for each octave below the nominated stated filter frequency. A slope rate of 12dB/octave should be considered the ideal, although some units will be happy with a slope of 6dB/oct provided that the crossover frequency is well above the minimum given for the particular units, while a slope rate much higher than

Yorkshire Fane Acoustics Ltd., Hick Lane, Batley, W. Yorkshire.

Although in most cases these are specifically intended to compliment that manufacturer's drive units, a filter is a filter, and so providing that the filter frequency impedance and slope rate are suitable, there is no reason why any filter cannot be used with any compression driver.

Another problem with compression drivers is that of compatibility with horn throats and while, at the general purpose end of the market most manufacturers have adopted the 1.362" x 18tpi (threads per inch) screw thread coupling, there is no such standardization at the professional end of the market, with JBL, Vitavox, HH, Electro-Voice, Altex, DAS, RCF and Emilar all using

SPEAKERCHECK

their own different bolted flange arrangement.

Fortunately, there is a movement toward using the two JBL flange systems, a one inch diameter coupling with three mounting bolts for smaller drive units and a two inch, four bolt flange system for the larger drivers, as some sort of standard, and throat adaptors are available from Vitavox and from JBL that will enable most types of compression drive unit to be coupled up to a horn with either size of JBL flange, or vice-versa. Similarly, adaptors are available to enable the 1.362" x 18tpi screw thread drivers to be coupled up to the larger flange coupling type of horn, but conversion the other way around in this instance i.e. where a large diaphragm, flange coupled driver is to be coupled to a 1.362" x 18tpi horn is emphatically not recommended due to the severe distortions which will develop in the reduced throat entry to the horn.

In fact, this very problem of how we were going to couple all these different types of drive units with all their different coupling arrangements up to some sort of standard test horn was one to which some considerable amount of careful. thought was given at the time we commenced testing compression drivers towards the end of 1978. After making a number of enquiries, we came up with what turned out to be as near to the perfect solution as we are likely to get short of designing our own special horn and having it custom made a process which would be prohibitive on cost grounds alone.

In the event, it transpired that Vitavox had been faced with a similar problem some years previously and had adapted one of their industrial horn flares for the purpose. Basically, it is a 42 inch long, circular, true exponential horn with a relatively slow expansion rate and offers really good acoustic loading to the drive unit diaphragm. Further, the horn throat has been constructed in a number of sections, each terminating in one of the "standard" flange or screw thread coupling arrangements, all of which bolt together to make up the full length horn for the smallest throat entries.

Due to its form of construction, the horn is much less "live" than many cast alluminium radials and apart from the presence of a known small resonance around 1Kz, it is ideal for our purposes. The Vitavox laboratory horn is not commercially available, nor was it designed for any particular type of drive unit, and



ELECTROVOICE 1823/M

its use would seem to be the fairest and most convenient way to test compression drivers.

After all, compression drivers are never used without a horn, so it makes sense to test them on a horn especially when the horn in question has better characteristics than the majority of commercially available horns anyway, and a natural cut-off frequency which is well below that at which any compression drive unit is ever likely to be used and will therefore ensure constant acoustic loading right down to the lowest practicable frequencies and beyond. The horn details and dimensions are shown in the illustration for those who



ELECTROVOICE 1823

may wish to check the facts out for themselves and our thanks are due to Vitavox for their very willing assistance in allowing us the use of their horn.

For our test procedure then, each compression drive unit is coupled to the appropriate throat entry on the standard horn, which is hung in free space in the anechoic chamber of GEC-Hirst Research Laboratories at Wembley and a calibrated measuring microphone is placed at a distance of one meter on the central forward axis of the horn.

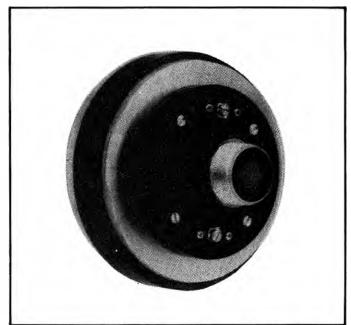
First of all, the impedance of the driver is plotted out, and from this curve, we can usually tell the range of values over which the impedance varies and the nominal fundamental resonance of the driver. It is useful to know whether the resonant frequency is inside or outside the useful working range of the drive unit.

Secondly, a sine wave signal, at a voltage calculated to dissipate one watt in the drive unit voice coil at the we are also able to calculate the basic sensitivity of the driver when coupled to our standard horn. Remember that this could well be different on other types of horn, but nevertheless serves as a valid and useful comparison.

Lastly, the swept sine wave test is repeated, but this time, at a voltage calculated to dissipate 10 per cent of the maker's stated system power rating, or the maker's stated



DAS M--100 continuous sine wave power rating (whichever is the greater) at the maker's stated nominal impedance, and from these curves, we look to see if the unit is likely to meet its power rating and at what levels

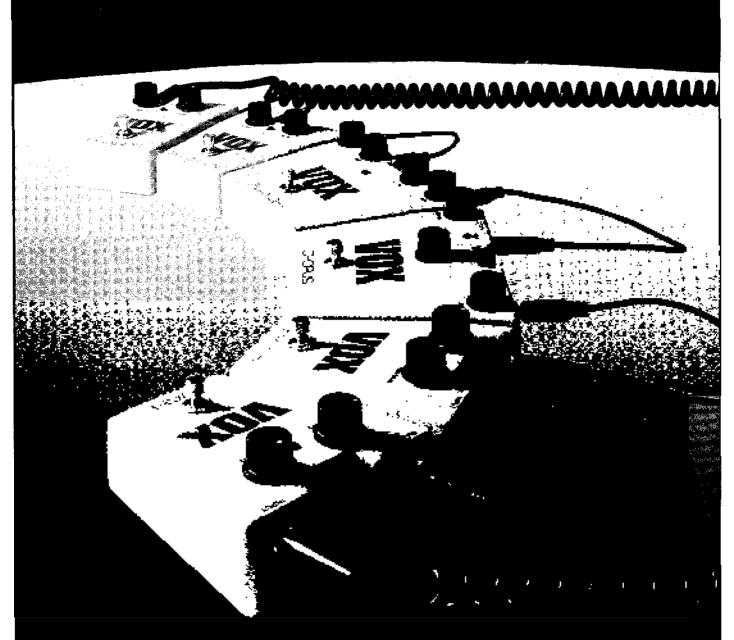


RCF TW 101

maker's stated nominal impedance, is swept from one octave below the maker's stated lower frequency limit through to 20kHz and the frequency response of the driver is plotted out and published in our review. From this curve.

of total harmonic distortion.

Where a unit has lower frequency response limit that is much below 1kHz, then the 10 per cent of system power rating may be increased to 20 per cent in cases where it is continued page 83



The New Range of VOX Effects Pedals

Sound processing has come a long way since Vox first set the pace and Vox are again leading the way, this time with

— a wedge — which means that the pedals can be used together in a natural semi-circle, and the leads and the phantom power connections are all at the back; well out of the way. It's simple and obvious, but it took Vox to think of It!

electronics are pure 1980s with LED indicators, low noise levels, and external phantom power possibilities. The switching

is ultra-clean and ultra-quiet, and Vox thoughtfully include a

The range includes a super versatile "Phaser", a warm valve "Distortion", a super funk "Wah", a clean "Compressor", the sweeping "Flanger", and the etheral "Chorus". All are battery powered as standard and all are distinct in the new Yor livery.

now much: rount se sumplised. Vox nave designed not only pedals you'll want, but pedals you can afford!

Prices run from £27.00 to £58.00 including VAT. Check them out, they were designed by musicians from us to you.



Please send further details on the VOX Pedals

Name

Address

VEIM 780

VOX

VOX Limited 32-34 Gordon House Road London NW5 1NE Telephone 01-267 0702

SPEAKERCHECK

continued from page 81

considered likely that the unit may be used over the lower middle frequencies, but this will only apply to the larger type of unit, with large diameter diaphragms, intended for coupling to the larger types of horn which are capable of properly handling the mid ranges. In cases where this option has been invoked, this will be clearly shown in our results presentation.

For those interested, the equipment used in the laboratory is as follows:-

Bruel & Kjaer ½" capacitor microphone
Bruel & Kjaer Hetrodyne
Analyser type 2010
Bruel & Kjaer Distortion
Measurement Unit type
1902

Bruel & Kjaer Chart Recorder type 2305 HH Electronics Power Amplifier type TPA-100D



Ken in the Lab with his testing gear

Vitavox 190Hz. Expontial, circular laboratory horn Various: Cups of coffee and tea, buttered current

buns, crusty cheese rolls, etc as provided by the excellent GEC-Hirst tea ladies!



Having gone through that little lot, I am afraid that there is no room for any actual test results this month — quite apart from the fact that we are not booked into the lab until after this edition goes to press, so having whetted your appetite to find out all about compression drive units, I am afraid that you must hold your patience now until the August issue!

Ken Dibble

Ken Dibble MIOA is a musician with a background in engineering and manufacturing sound equipment. He now works as an electro-acoustic consultant.



DRUMCHECK

Hoshino Professional 5075 £399 inc.VAT

Here's another of the cheaper sets we promised to bring you from time to time. As per usual for sets of this price, this one originates in the Far East and many of its component parts look very similar to those to be found on the other economy-line sets.

This month's set is our normal standard (for review purposes) five drum kit, but I know Hoshino make concert toms too, from six to 16 inches in diameter, so if you so desired, you could have a 13-drum set at a highly competitive price.

The company in the past have been seen to concentrate on the economy, or dare I say "bread and butter" end of the market. This however, is their stab at the professional end and I think in fairness, what they mean with this set is the semi-pro area, because at just under £400 there's no way the set could be confused with, say a comparable sized Ludwig at...

No, what we have here is something aimed, pricewise, at the top of the economy line. They do have more expensive sets which I plan to review later in the year.

There's not an awful lot of

history to write about the drums since by and large little is known about them. They appear to have been available in Britain for the past 10 years and do not, I am reliably informed, have anything whatsoever to do with Hoshino Gakki Ten Inc who are the maker's of the more expensive and expansive Tama lines.

So this set is called the 5075.68 (the .68 designated fine silver finish) and consist of 22-inch bass drum; 12 by 8, 13 by 9 and 16 by 16 torn torns, a five-inch metal shell snare drum, two cymbal stands, hihat and bass drum pedal and of course a stand for the snare drum. Also we get one pair of sticks and one pair of brushes.

Bass Drum

The 22 by 14 inch bass drum has eight pressed-steel claws and cast T-handled tensioners per head and a very deep trenched pair of chromed counter-hoops made from metal and inlaid with plastic to match the rest of the kit.

One hoop is factory fitted with a rubber block to locate the bass drum pedal. These hoops are interesting in that instead of being chamfered on their outside edges these have

very straight, right angled sides. The claws, however, are shaped to accommodate them adequately.

The spurs are made from thickish tubing with a cast, spring ratchet block, bolted to the shell to maintain and set their angle of incidence and they have a very large wing bolt to lock them in position. Unlike many other spurs, these particular ones have only a rubber crutch tip at their ends — not an alternative spike,

Tom toms

The 12-inch drum has six square headed tension screws per head, so has the 13 and the floor torn has 16 in all. All drums have triple flange hoops with larger than usual slots to take these screws. All drums have internal under-batterhead operating dampers with a good sized knob to lock them in place.

Accessories

Hoshino's snare drum stand has a good strong tripod base made from flat steel with substantial and very business-like looking rubber feet. It has a basket-type adjustable mechanism like the old Buck Rogers which locks via a wing bolt below the basket (and within a metal tube).

The playing angle adjustment has a large cast ratchet with a spring inside it which locks with a swing nut like the old Rogers flattened rod type. The gripping arms of the basket are sheathed in rubber, and the height of the business end of the stand is locked by a smallish cast wing bolt tapped directly into a cast boss which pushes and deforms an undersized spring-steel metal ring which is inside the boss. This locks the height at the desired position. It is a good steady stand which works well and doesn't have some of the "basket shake" which some far more expensive stands are plagued with.

The hi-hat has the same flat tripod legs as the snare drum stand and there's a larger cast wing bolt to hold the legs out in position and they have the same substantial rubber feet. Hoshino fit a pressed steel clamp to their top tube to ensure correct height adjustment and their plastic bottom cymbal cup has the usual screw



operated tilting facility.

It's a centre pull model with a two-piece cast sand-blasted foot plate and a toe stop. The plate is joined to the mechanism with a short plastic strap which, to eliminate wear, is doubled around a stlrrup bar fixed to the centre rod.

The action, as you would expect on a set of this price, is not adjustable, but the cast saddle base does have an adjustable spur. Hoshino's top cymbal clutch is turned, has a cast wing nut to lock it, two thick felts and two substantial, milled edge locking washers to lock the whole clutch "sandwich" together. The centre pull action by the way, is not the sort where the centre rod screws into the bottom, but instead is loose fixed and articulated like the old Grestch ones

Snare drum

This drum is 15 by five inches with eight double-ended nut boxes, triple flange hoops and of course square headed tensioners. The drum has an internal damper too, and a cast adjustable, cam action snare release with a pressed steel lever (when in the off position this strainer rattled, but in the on position it was fine).

It was fixed to the 20-strand snares with a plastic strip. The shell itself was quite thin, with an inverse bent over flange and a slight snare bed set into it. As usual the shell is strengthened with three slight indentation beads around its centre.

This drum, as all the others, has Remo Soundmaster heads. I notice in the catalogue that Hoshino produce a six-and-a-half inch deep snare drum for their large "pro" sets.

Sounds

To be honest, I was surprised by the sound of the snare drum. It was quite a lot more "ballsy" than I expected. It, like all cheap snare drums, does not have an extraordinary amount of definition at high volume — it doesn't really roar. However, for medium type playing volumes, it seems pretty good.

As I boringly write every time! look at a cheap set, better quality heads would make for a better sound, especially on the snare drum, but unfortunately this would also increase the price and push it way over the £400 mark.

The tom toms sounded strong enough even with the Soundmasters on — they really were good and thick. The bass drum too sounded OK with the original equipment, but it would get a stronger, more definite sound with Remo Ambassadors, CS or Evans Rock.

The shells themselves are made from six plies of an oriental light coloured wood which resembles birch and are much better finished off inside than the last Hoshinos I reviewed. They are actually very very clean for a mid-range set of this type.

Hoshino's bass drum is "as near as dammit" the same as Pearl's and the latest Gretsch. It has a horseshoe-shaped cast framework with two screw adjustable (but unsprung) spurs with a nice thick leather strap and a two-piece cast footplate and a toe stop to match the hi-hat stands.

The expansion spring is stretched up towards the player and away from the pedal and this cast "stretcher" is joined directly to the beater's cam axle and so acts as a lever (lockable with a pair of drum key operated screws) to position the beater closer to the head but without disturbing the "throwing arc".

The Hoshino differs slightly from the Pearl in that it clamps to the loop in the old fashioned way with a single thumb screw below the footplate (Pearl's has a more remote clamping system from halfway up the frame itself). Anyway the feel of the pedal is very like Pearl's and except for the very coarse hairy beater they fit, I like the pedal just as much. This beater is, of course, adjustable in height for larger or smaller bass drums.

As one would expect, the Hoshino cymbal stands have exactly the same flattened steel tripod legs as the other supports (and the same large feet). The stand is in three stages, each with the cast boss with spring ring insert and Rogers type wing bolt.

The tilter is cast and internally sprung and is sensibly long for really unencumbered cymbal placement. It's finished off with the usual felts, metal washers and wing nut. Hoshino supply two of these stands with their sets. They also make a boom cymbal stand for their more sophisticated "professional" sets which have double-braced legs and what would appear to be slightly wider bore tubes.

Hoshino's tom tom legs are very good and really surprised me. They are without doubt the thickest available from the Orient. Fabricated from solid rod and with a double bend at the bottom with really thick crutch tips — they locate into cast receiver blocks fixed to the tom tom shell which have internal eye bolts and large wing nuts to lock them solid.

The legs themselves have an interesting knurling feature on them. It's in three bands with roughly a quarter of an inch between, to give a setting up quide each time.

So the only item left to comment on is the double tom tom holder. This, in appearance, is very like Pearl's professional 900 series model and cosmetically looks very good. It's basically the old Trixon/Sonor idea of two tubes joined together via a splined sandwich.

Hoshino's wide bored tubes are joined by a cast ratchet which is sprung and the two halves have a wing nut and bolt through them to secure the playing article. These two arms locate into and penetrate cast blocks — a double one fixed to the bass drum shell and a single fixed to the tom toms. Like Pearl's, these blocks have one part of a pipe type clamp cast into them and the other

half, or semi circle, joins to this with a pair of drum key operated sprung screws.

Each of the arms has a lockable memory type clamping ring to make sure the drums are set up in the same way each time. This holder works well and Hoshino must have spent quite a lot of bread tooling up for it. It's not quite as sophisticated as Pearl's, but it ain't that bad.

Appearance

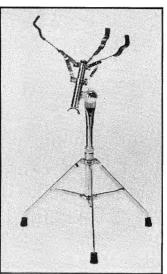
The drums looked very good externally and were, as I said, nicely finished inside. The outside finish I saw was called "fine silver" and looks very professional. They make eight finishes, all plastic, and all are pretty good (although I'm not too sure about silver silky).

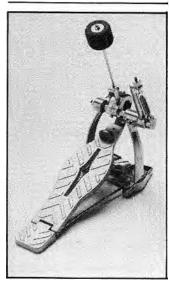
Their catalogue has a set on the front of it which actually has a natural wood finish and looks extremely good. However, I couldn't see this listed in the catalogue, so I presume it's for Japanese home consumption.

Hoshino seem to have changed their badges — they now have black and silver embossed rectangular ones. The cheap set and the 22-inch professional set have these, but the larger sized pro set has circular embossed ones which is a little confusing.

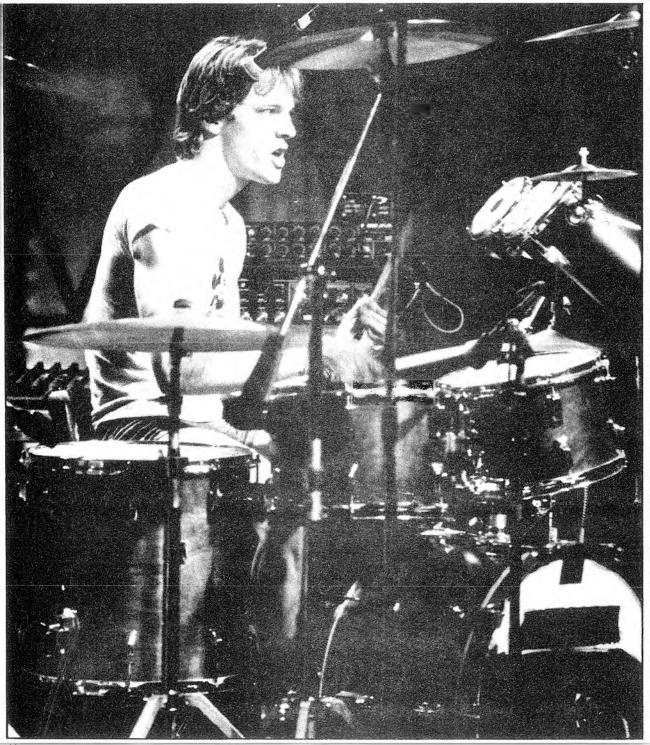
Henry Roberts

In last month's Drumcheck unfortunately a few gremlins crept in and you may have noticed some errors. We apologise for any inconvenience caused.





STEWART COPELAND



Unless your senses have been impaired for the last 12 months, or you have been orbiting Venus in the latest space probe you cannot help but have noticed the appearance of a band called the Police.

Not since the days of the Beatles has a group gained such mass popularity in such a short time. Even in the heady world of pop music, their rise to fame takes some beating and believing. Their story has already become a legend.

Their formation from three diverse musical backgrounds ... failure to break through in Britain ... flight to the USA ... hitting the big time ... triumphant return... followed by the conquest of the rest of the world, is already well known.

Reads like a fairytale doesn't it, and I'm sure Sting, Andy and Stewart have pinched themselves more than once during the past year to make sure that it all really is happening. Even now the fans are eagerly devouring every bit of re-packaged vinyl while waiting for new Police output.

The success of the Police relies on many factors, not the least being hard work and the fact of being in the right place at the right time. But probably the biggest factor is the sheer breadth of their appeal.

In the USA, which is still basically a conservative nation, they were the acceptable face of New Wave, over here they have scored on other levels. Their songs are good, their lyrics interesting and there was a whole army of females who were waiting to fall in love with Sting. They were also a band musos could relate to because they could really p I a y!

It wasn't just the fact that individually they were good musicians, but the sound produced together made nonsense of the theory that the only way to get a full sound from a three piece is to turn everything up. On stage the Police material ranges from out and out rockers to dub reggae, but whatever they do the sound always seems full and balanced.

Once again, it's all down to clever use of effects, empathy and musicianship. All of a sudden people want to sound like that and want to know how they do it. In the drum stakes Stewart Copeland is a name which will probably be quoted as a "major influence" by young drummers before too long.

Forget all stereotyped images of the drummer in the band being the down-to-earth self-effacing artisan. Stewart Copeland is a brash bold American, not in the flash overpowering sense, but he exudes a confidence which comes from knowing he is good at what he does.

He's a seen-it-all, done-it-all-before type character who, you get the impression, would have made it in some sphere



of rock and roll whatever happened. God knows he tried hard enough having been a disc jockey, a tour manager, in addition to running a record company and publishing his own magazine.

"I never thought I'd be a musician, it just turned out that I was so prodigiously good at it. I was left with no alternative but to pursue it as a source of income because I'd done everything else in the business. I just never thought I could handle the commitment that it takes to be a musician because it does actually mean that you've got to take your shirt off and get right in there. You can't keep your hands dry as a musician."

It was Stewart in fact who formed the Police in 1977 and he remains a major driving force behind the band with his singing and writing as well as his playing. He is also one of those rare drummers who manages to project on stage, and contribute to the character as well as the sound of the band.

The fact that he is American, and the band first broke big in the States led many people to think that the Police were a US outfit. However, in reality he has probably spent more time out of the US than in it.

Being the son of a serviceman he grew up in Beirut, where his exposure to rock and roll was definitely second hand. However, it was enough for the young Copeland to become addicted, and he soon worked out a good way to get gigs.

"I had to go out and sleeze my way onto other people's drum kits and borrow other people's gear. I developed a whole technique of getting my way into a group by sitting in at rehearsals and saying, 'hey, it sounded great guys, I really like it, I wish I could be as good as you.'

"I'd watch the drummer and say 'oh, how do you do that bit, can I have a try?" And I'd always get it off better than he could and eventually learn all the songs for the gig better than he could. In the end I'd not only nick his gig, but I'd say, 'hey, can I borrow your kit?"".

In the meantime his father, himself an old jazzer, sent him to local drum teachers, and eventually when Stewart

came to England he went to Max Abrahams for some tuition. Years of jamming and just playing around doing a variety of things led to his becoming the drummer with Curved Air, after a spell as their road manager, in the mid-Seventies.

If nothing else, it provided him with the opportunity to invest in a "real" drum kit. His first ever kit was a turquoise pearl Premier, which he still has, but the record company advance proved too much of a temptation to the ambitious young Copeland.

"It was the first time I could afford a real drum set, so I just went out and got the biggest drum kit you ever saw. It was a gigantic perspex Ludwig and it was really huge. I dented my knuckles a lot and was really disappointed. I tried a lot of other stuff but it was all the same poor quality and I looked around thinking that somebody must be doing it better by now,"

Stewart considered all the kits to be too flimsy and concluded that they must have been designed by ex-jazz musicians who are retired and now work in drum factories designing drums. Undaunted he set about scouring London for the right kit, and also hoping for a commercial deal.

"I figured now I was a prestigious member of Curved Air, I could do a deal. I found these drums called Tama which I'd never head of before, and certainly nobody else was using. Their stands were really huge and thick, just a completely different thing, the difference was just like chalk and cheese — these big meaty stands, and the drums were nine ply.

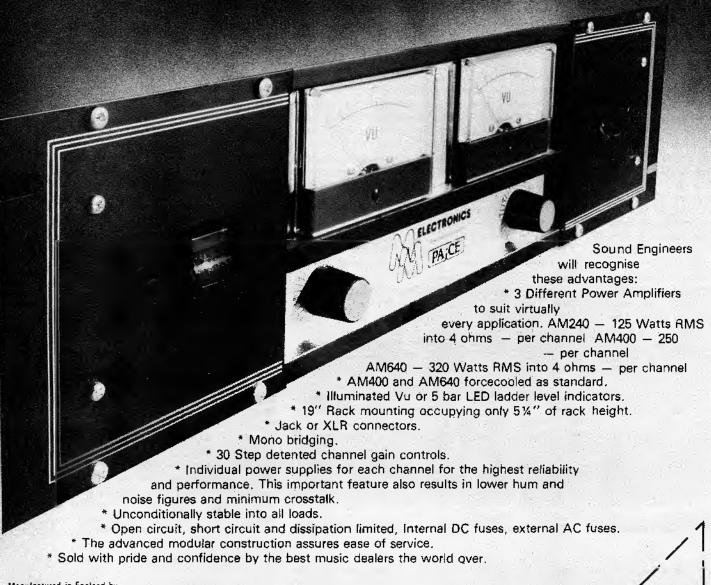
"I'd had it with big drums, so I got a really small set and did a deal with them. It was the first deal I ever did and they'd never heard of Curved Air, they'd never heard of anybody. I sent them these press clippings I had, so they said 'says in print he's farmous, let's give him some drums, he's the best we've got!"

"So they gave me a drum set, and immediately the first night I used it the PA guy came backstage and said, 'please burn your Ludwig because all of a sudden I'm able to get a good sound out of your drums for the first time."



AM Series Professional Power **Amplifiers**

MM's new range of power amps are the result of taking a long, serious look at what is really required of a power amp in todays studio and PA systems. They're not built around some 'fancy', 'new' technology but based upon a well tried and tested design that guarantees to give you exactly what you want; Night after night of unflinching reliability with absolutely NO hassle.



Manufactured in England by





LECTRONICS

Contact your MM dealer now for further information or write to: Pace Musical Equipment Limited, 63 Kneesworth Street, Royston,

Herts, Tel: (0763) 45321

Following the demise of Curved Air, and fired by the punk explosion, Stewart got together with Sting, recruited Andy Summers on guitar and the Police were born.

The rest, as they say is history, but throughout he has stuck with Tama using that original kit during the first 18 months to two years with the Police. Considering the hammering that he gives them, that's a fair assessment of the lasting power of Tama. He bought another identical set in the States which he was at great pains to point out he actually bought. "The Police were not so rich and famous then, which shows that they actually are the best drums." He has since added a third identical kit.

Stewart maintains that his kit is based on one that you can go out and buy, but he is constantly adding things to it and changing drums around. Consequently having asked for a run down of his kit, we only got as far as a 22 inch bass drum and his smallest tom tom which is just eight inches. He is far more into talking about the effects that he uses on his drums.

"The most important gadget that I've got, that sets my drums apart from other drum kits, in the echo. Microphones send half their signals to the PA and the other half to another little mixer which goes into an echo box, a Roland Space Echo. So a repeat comes back to me off the drum set and you can build up totally new rhythms that have never been heard before.

"It's had an incredible affect on my playing. I control it all myself with a footswitch next to the hi hat which turns off and on, and I can just bring it in for just one little lick and suddenly there's two people falling down the stairs, and then it just goes out again.

"Or I can use it all the way through a song for a rhythm to build on. It comes up with rhythms that you'd just never arrive at on your own." He originally bought the echo unit to use with a guitar, but decided to experiment with it on the drum kit as well.

"I thought, why not put a microphone on the snare drum and put that back through the echo and see if I can get some dub on stage. I was going to do some onstage dub, which is actually what it all is, and it worked really well.

"I gradually delved into it and modified the system and perfected it to the point where the whole drum sound goes into the mixer so it can be processed accurately. I also use a digital echo now, which does it really accurately. The two signals are identical, whereas before, you'd have the sound of the drum coming through the PA and then the repeat sound would not be nearly as good and would only be on some drums. Now it's perfect, the bass drum



comes through the PA BOOM BOOM BOOM and it's a real drum sound."

Another gadget he uses is a synthesized drum, but not the usual kind. "Tama make one which is pretty neat. Most people use that awful sound, but I've got one on the bass drum which is a contact mike really low down. When my bass drum lands it sounds like Godzilla. It's just deeper than any bass drum you've heard before because it's electronically enhanced:"

While acknowledging the importance of these effects to the overall Police sound, Stewart was quick to point out that they conquered America with none of these added frills. "We went out there with no record company, nothing, just the three of us — guitar, bass and drums. Now that we have these gadgets we're able to do a lot more."

It is obvious that he believes the key to everything is not in gadgets but in the player's ability as a musician and feel for the instrument. He acknowledges the advantage of some formal training, like teaching you how to hold the sticks properly, but only as far as it enables you to progress faster on the instrument.

"Handling the instrument is only a third or less of what's required to be a good musician. I mean, how fast you can move your fingers and all those things I was taught are only important up to a very small point. What's really important is whether or not you've got anything to say on the instrument. That's the whole mystique — if you've

got talent or not in the first place."

Being successful has meant that he can now have his own drum roadie, which has produced some interesting situations. He remembers one of the early roadies in particular: "I once showed up at a gig after coming back from the States, and the new English drum roadie was there, and his previous gig had been working for Billy Cobham.

"I thought, 'wait a minute, there's three thousand people shouting and screaming and going berserk in front of me and one po faced roadie sitting behind me. 'The amount of time devoted to thinking about either one or the other was...I don't even wanna tell the truth!"

Stewart has no complaints about his current crew, in fact if something happened to the band, the roadies could do more than an adequate depping job. Apparently they are all excellent musicians who take great delight in doing a Police medley at soundchecks.

"Whenever we show up they're playing 'Message In A Bottle' and 'Can't Stand Losing You' and doing it really well with all the same inflections."

And with no new Police gigs or vinyl likely before Autumn, I reckon the lads better watch out or the roadies may find themselves in big demand.

DAVID LAWRENSON

DRUM NEWS

The NEARY DRUM TOR-QUE is actually a precision tuning item which the drum world has known to be feasible for some time but it's not until now that a manufacturer has got it together to produce the thing.

Remo's literature for the past five-to-10 years has included a photograph of one of his technicians playing a drum with clock-type pressures gauges fitted to each tension screw.

Basically, then, this is a sophisticated drum key shaped like an elongated spinning top which fits comfortably into the hand with a rotary-gauge on top graduated from 0 to 25kg/cm. All one really has to do is read off the number (say eight) and make sure that every other tension screw matches this number. It's simplicity itself to use, especially since the manufacturers supply a chart with the unit. They also thoughtfully furnish you with a selection of interchangeable, different headed "bits". A square one, screwdriver slotted one and a "U" shaped one to fit a bass drum, "T" handled, tension screw. It is, of course, essential to make sure that the instrument is measuring the head tension and not just the bolt tension and to this end the Neary Company recommend removing each tension screw, cleaning and then lightly oiling their threads and bottoms. One then makes each bolt finger-tight and then starts to tension in two kg/cm turns until the desired final tension number is reached. Neary stipulate a slightly different tensioning sequence to what is generally considered the normal one but I found that straight across diametrically and then round one and back again worked fine.

The relative values they give in their chart are interesting since in some cases they conflict with standard tuning practice; they list higher than, lower than, and average values, and in each case the tom tom tensions do not match numerically for batter and sympathetic head and appear to vary in a ratio of approximately 3:2. Mind you. these are only guide lines and the player is expected to work his own tensionings out. For the snare-drum they always

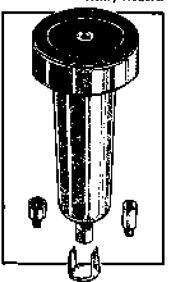
advocate 6kg/cm on the snare head and either 6, 8 or 10 on the batter head according to taste.

They list"funky" tunings too, which in the case of the tom toms involves adjusting any two opposing tensioners to roughly one half of the value of the others. In the case of the bass drum they specify the tension on the top two bolts should be two thirds the value of the other bolts (on the batter head). The way to check the tension on any head before a gig is as a guitarist tunes his instrument. He decreases tension on the string and then takes it up to the desired pitch. The same process should be used for drum torque reduce the tension first then tighten to the desired number. So, in conclusion, drum torque is indeed a very useful device which should prove very popular, especially at the professional end of the market. Not so much because of its price (£26.45) but mainly because pros are the guys who are fastidious enough to want (and need) to have their drums accurately tensioned in the first place.

Studio players, engineers and record producers will find drum torque a boon to enable positive tuning and more importantly create a norm for the industry to work with.

The actual unit is made in Kentville, Canada and has an A.B.S. type black plastic outer cover and internals of metal. One recommendation I'd like to make is that it should come in some sort of permanent box or pouch to protect it while it's in the drummer's trap case.

Henry Roberts



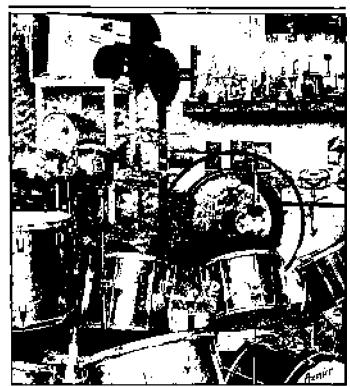
Dear Drum Forum,

I really do feel compelled to reply to the letters published in IM from Chris Stevens and Oliver Link and add the cryptic comments, "well done gentlemen, you got Sonor mentioned yet again"! But joking aside who are we trying to kid? Dealers? Drummers? I think not, the time has long passed when everybody accepted verbatim the golden words issued forth by drum endorsement superstars. Drummers today are much more critical and are quite capable of making decisions in a much more constructive way.

The point I am trying to make is that if some manufacturers would stop the "in fighting" and get on with the real business of offering quality products at reasonable prices, that drummers today can afford, it would be of benefit to everyone concerned.

One final point, stop taking up precious columns on such matters and leave the space for more relevant topics for drummers, from drummers.

Glyn Thomas, Director, Pearl Music Ltd. London,



Stix Drum Centre in New Road, Peterborough, maintain that they are not like the usual music shop, where the unsuspecting customer is pounced on as soon as he pokes his head round the door. Chances are, the first thing you'll get is a cup of coffee.

The place is run and owned by Jim Luff, an ex session drummer who remembers when shops weren't all cut throat super stores. "Most guys who come here," says Jim, "seldom go anywhere else after". According to Jim, it's more of a drummers' meeting place with customers usually becoming friends.

The shop is on two levels, with parking on the forecourt, and looks deceptively small from the outside. Approximately 30 kits are in stock at any time and the shop has main agencies for nearly every drum make. They're all set up as well, not stacked away on shelves. You can come and try virtually every drum on the market.

Stix has just started importing some American and European accessories and bits and bobs of percussion which are not available in this country as yet, and these, like everything else, will be competitively priced. They try and strike a happy medium between discounts and service. The latter, with spares in stock for nearly everything, seems more important than price to most drummers nowadays.

They have a service department where they re-cover and repair and customise, re-lap calf heads, have their own sticks made and are open six days a week. The shop is only six miles off the A1, and what with that, and the major roads from the Midlands, regular customers come from literally miles away.

The biggest thing about it, is its sound.



The CUSTOM SOUND 703 Combo.

The new Model 703 provides the musician with a compact yet powerful combination amplifier. It is of exceptionally versatile design suitable for the smallest club to large on-stage performances. The Model 703 houses a single channel amplifier capable of producing the widest variety of musical sounds from your instruments.

A unique input configuration provides Hi-Lo sensitivity inputs which may be switched for normal (flat) response or bright for additional treble boost. An input gain is provided to match the amp to the output for your pick-up and to allow for a 'clean' sound or heavier overdriven sound as desired.

An active four band tone network of exceptional range enables complete control of your sound to be achieved whilst the overtone control allows for variation of the levels of harmonic distortion to achieve the level of colouration and sustain required by the musician.

The two high sensitivity 10" speakers give a penetrating yet full sound and enable the whole unit to be kept to compact and exceptionally portable dimensions.

The Model 703 can deliver 75w RMS into its own speakers yet may be coupled to a further 8 ohm enclosure for a full 100w output,

SPECIFICATION

High & Lo Sensitivity Inputs: Bright/Normal Switch: Input Gain Control: Master Volumn 4 Band Tone Controls: Bass, Mid-Lo, Mid: 2 x 10" High Sensitivity Speakers: 75w RMS into own enclosure (8ohm): 100w RMS into further 8 ohm additional cabinet: weight only 25 kg:

Dimensions only 32 x 61 x 46 cm (32 x 61 x 54 cm inc. castors)

Ine Volument of the search of

At JVC we don't believe in restricting our technological know-how to a few glamorous, high-cost items. We take the same painstaking care over our enormous range of audio accessories.

They're a sight for sore ears.

Right between the ears

We know how important private listening has become to the music lover. So we make sure our headphones live up to our hi-fi.

There are two essentials in headphone designing. Their acoustic device must ensure delivery of rich sonic expressions. Their fitting device must allow for a steady, comfortable placement. All our headphones are built to become a part of you – your JVC ears.

Take the HP 1100 for example. It meets the first requirement with large diameter/high impedance (100 ohms) earpiece driver units for rich basses, clear mid-range notes and brilliant highs. We've reduced its weighty feeling with a dual headband construction that distributes the weight evenly over the head. Frequency response is 20 to 20000 Hz.

If your tastes veer towards the louder, heavy-bass variety of popular music, the HP 880 headphones are purpose-built. The HP 880 set offers high performance at a truly comfortable price.

The list goes on. The HP 550's pressure-type construction makes it ideal for monitoring recording sessions. The HP 303 is an air tight stereo set and features large diameter driver unit (46 mm) with ingenious polyester diaphragm. Why not try them on for size?

Pick up the Works

Whether you want to record a flugelhorn, a fly on the wall or your father-in-law, JVC have the best mike around. For musical instruments the M 201 and MU 104 electret condenser mikes more than do the job (the former is stereo).

We recommend the MD 825 and MD 111 dynamic mikes for vocals, parties, speeches, meetings and interviews.

You'll find full information on directivity, frequency response, impedance and sensitivity in our



EADPHONES

HP 100

guide to gaids.

useful microphone guide. It's worth picking up too.

Moving on from the Moving Coil

These days every music lover knows the advantages of the MC (Moving Coil) cartridges, especially their indep-

At a mere 150 microgrammes it weighs 100 times less than conventional coils. So it doesn't hinder the free movement of the stylus.

What's more, we've successfully positioned the 'microcoil' 5 times closer to the stylus. No



High performance cartridges from JVC

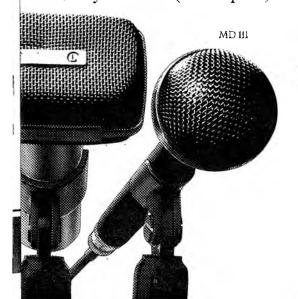
endence of loading conditions. Now, using our advanced technology, JVC have developed a new design that far out performs conventional MC Cartridge designs.

In our new design the moving coil isn't really a coil at all; it's a printed pattern for a coil on a verythin wafer (1 mm square).

more must a signal picked up by the stylus travel the length of the Cantilever to reach the coil. JVC's 'direct coupling' design has eliminated phase delays and offers excellent transient response.

The result – consistent high performance.

If you are intrigued by JVC's accessory range why not fill in the coupon below for full details.



☐ headphones	I me further guidance on microphones ick which applies)
Name	
Address	

HP 1100 headphone

To: JVC (UK) Lt Eldonwall Tradir Estate, Staples Corner, 6-8 Priestley Way, London NW2 7AI



PONT MISS PSYLLE (SOUTH SULL) (

2-4 September 1980 West Centre Hotel London

Visitors will be able to see a fully equipped recording studio in operation which will include a 24 track console mixer, tape machines and a full range of ancillary equipment

SEE THE ROLLING STONES FULLY EQUIPPED MOBILE RECORDING STUDIO

3 Day Conference covering 14 papers presented by specialists in the professional audio industry

SEASON TICKETS & CONFERENCE BROCHURES NOW AVAILABLE

PROSOUND '80		ion on the following: lait les particularités suivan folgenden Einzelheiten:	tes:	
Batiste Exhibitions & Promotions, Pembroke House, Campsbourne Road, Hornsey, London N8 (01-340-3291)	Company, Société, C Address, Adresse, A	□ Conference □ Organised Visits □ Conférence □ Visites d'études □ Konferenz □ Gesellschaftsreise Gesellschaft □ dresse □ Date Date Date Datum		□ Admission Tickets □ Billets d'entrée □ Eintrittskarten

CELESTION SPEAKERS NOW OPTIONAL FACTORY EQUIPMENT ON THESE RANDALL AMPLIFIERS.







120 Watts, 2 Channels Switchable, Reverb.

RG-60-112 C



60 Watts, 1-12" Celestion Speaker, Reverb.

RG-120-212 C



120 Watts, 2 Channels, 2-12" Celestion Speakers, Reverb.

Write for free short form catalog or send \$1.00 for complete loose leaf catalog with detailed specifications.

RSM-150-112 C

Randall

RANDALL INSTRUMENTS, INC. 1132 DURYEA, IRVINE, CALIF. 92714 P.O. BOX 10936, SANTA ANA, CALIF. 92711



Yamaha Pro Centre

Pearl Pro Centre

Road Amplification

Roland Products Centre

Wal Pro Bass

Marshall, Musicman, Fender, Gibson, Ovation, Springfield, CMI, Washburn always in stock. Interesting selection of tasty old American guitars.

Rig hire up to 5K

Repairs, set ups, spares, service — HP, PX, Access, Barclaycard or cash. Phone us for a great deal.



147a St. Michaels Hill, Bristol BS 28 DB. Telephone: (0272) 39887/36613. 51 Cowbridge Road East, Cardiff. CF1 9AE. Telephone: (0222) 374358

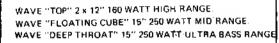
COMPLETE P.A. RIG FOR UNDER £2000?

1000 WATTS OF SPEAKER POWER!

wave speaker enclosures >

- Colonel with grant difficulty by the stants, noder-measured, ander pold oppressions not support to another specific policy of the stants of the standard of the standard

SEE YOU AT OLYMPIA Stand 183A



M: and M: 16 Channel.

M. and M. AP360 Stereo amp. 500 watt.



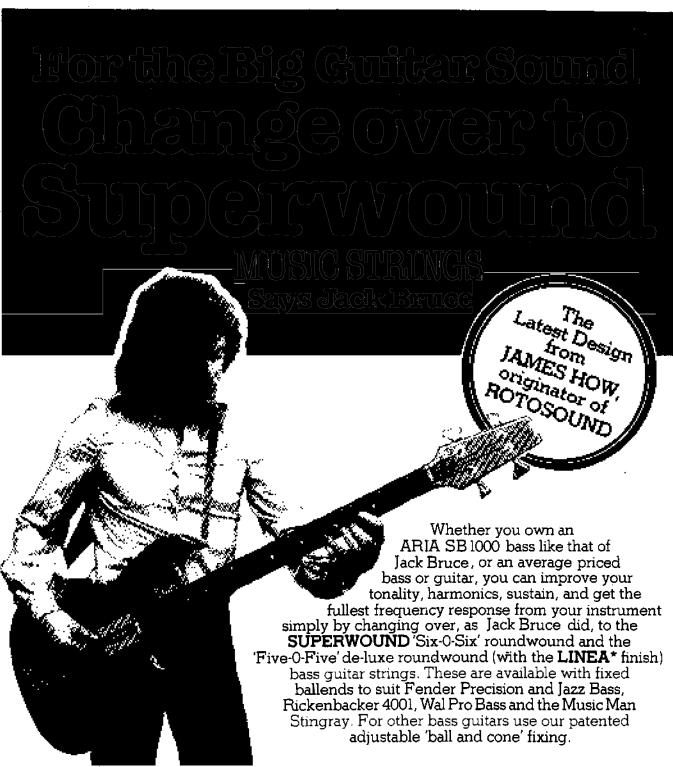
ROCKBOTTOM PRICE £1895

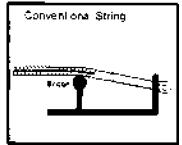
WANTE SUPER SOUND SYSTEMS longbank works ALM SCOTLAND PHONE 0259 60559

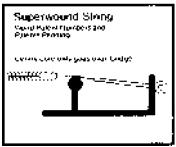
DI.				_		
Please	send	me	the	latest	wave	catalogue.

SHOWROOM OPEN 7 DAYS

Address







The difference between SUPERWOUND and a conventional string is shown in these diagrams, thus giving you the above qualities. *LINEA. This special finish makes a roundwound string feel smoother It is not 'ground'. Therefore keeps its original sound.



GET OFF THE MOTORWAY AND GET INTO



Special Offerson Slingerland *Premier* Marshall

Main Stockist acoustic

See the latest instruments from World famous manufacturers including:

Guitars Fender Gibson Aria Ovation

Grant

Fylde Ibanez Yamaha Landola Yasuma

Cordoba Harmony Kimbara

Columbus Satellite

Tito acoustic

Drums Premier Slingerland L.E.M. Olympic

Tama Zyn UFIP Paiste

Zyldjian Keyboard Rhodes Crumar

Wurlitzer Kawai Multivox

HFX

Amps etc.

Acoustic Traynor Maine

Fender W.E.M. Cloud

Custom JHS

Shure Orange Trucker

Effects

Electro-Harmonix

Schaller Bill Lawrence Dimarzio

-5510MH3 Columbus (1950)

Wem (11); Suprant and

Kimbara Trucker (activate)



Otherso Comments Premier ...

#FREE DELIVERY

10) DEPOSIT AND REPAYMENT OF UP TO 5 YEARS USUALLY AVAILABLE. ACCESS AND BARCLAYCARD ARE WELCOME



To: GROOPS, 18 The Rushes. Derby Road, Loughborough, Leics.

Join the GROOPS GREAT DEAL CLUB, We will send you our regular special offers completely without obligation distributed and positions disposi-

am interested in: Electronic Organs

Amps. etc Keyboard

Drums Guitars Other (Please indicate

Telephone

P.S. We will not visit you without permission

IM6

For everyone who plays -and everyone who wishes they could

Sponsored by Melody Maker and AMI

Here's where you can see and play some of the best and latest musical instruments in the world.

Here's where you can listen to big-name musicians performing and talking.

Where manufacturers and distributors will be waiting to show you their wares - and diścuss your needs.

Where? At the British Music Fair, the most important music exhibition in the calendar. We'll have over 60 exhibitors, displaying all types of instruments, amplifiers, speakers, mixers, accessories, sheet music and magazines.

The British Music Fair is the natural successor to last year's Live Music Show, now expanded into a celebration of British music, with information, demonstrations and the sheer fun of playing. Alf it needs is you.

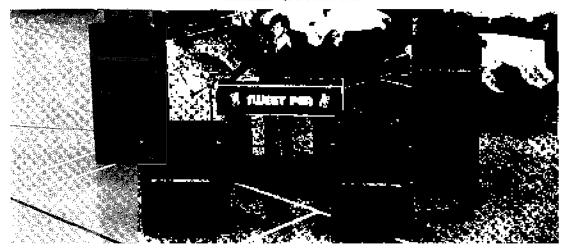


DLYMPIA LONDO

21st August—23rd August 21st August—Noon-9pm 22nd August — 10am-9pm 23rd August — 10am-6pm

Admission £1.50 (children under 14 not admitted unless accompanied by an adult).

THEATRE PROJECTS



David Abbott of Sweet Pea Discotheques, uses exclusively, Altec Sound Systems. For further information regarding Altec products, plus a comprehensive catalogue of all our other ranges, please write or telephone us at our shop in Mercer Street.



10-16 Mercer St., London WC2E 9LN JUST RING 01-240 5411

IN SCOTLAND

Gain Acoustics are proud to announce that they have just been appointed sole TEAC dealers for the north of Scotland

Full 4 track demonstration studio opening soon 11 WHORTERBANK DUNDEE (0382) 611476



SORRY!

The New Cimar Astra Range

By the time you've read this, the guitar will have been sold. It's the Astra 2085, leader of a new range of guitars by Cimar. The neat body shape and 4+2 peghead really stand out in a crowd.

It's the guitar you've been looking for, and the price won't kill you either. A fast guitar for fast people.

Check one out now!

51117.115

for more information contact sole Cimar distributor in the U.K:

Adjustable Torque Machine Heads.

Solid Brass Nut.

Ebony Fingerboard with Abalone Markers.

Full-Length Neck and Smooth Heel.

Magna-6 Pickups

Dual-Mode Pickup Switches.



JAMES T COPPOCK (LEEDS) LTD Highfield House Royds Lane Leeds LS12 6LJ

ROKK 12/2 MINI-MIXER



CHANNEL FEATURES:

- * Line input
- * Microphone input
- * Treble E.Q. control
- * Bass E.Q. control
- * Echo send/Foldback
- * Panoramic routing control
- * Channel Fader

Professional solid state circuits combined with semimodular construction for maximum reliability and ease of service.

One line input and one microphone input on each channel

Low impedance microphone input allows input leads of up to 50 metres (164ft) length

Maskell Barnes

MUSIC SERVE LIMITED 51 Station Road, Billingshurst, West Sussex, Billinghurst 3838



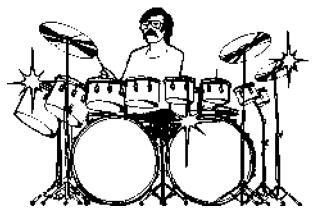
50 Bancroft, Hitchin, Hertfordshire, Tel-Hitchin 35494

24 TRACK AIR CONDITIONED STUDIO From £29.75 per hour

Accommodates up to approx. 30 musicians Automated Soundcraft 111B 32 x 24 desk Allison Research Computer Studer tape machines Dolby noise reduction throughout Eastlake Monitoring H.H. Mos-Fet amps Neuman, A.K.G.; Sennheiser, Shure, Calrec mikes Programming Technologies "Ecoplate" Digital Delay, Harmoniser, Flanger/Doubler, Noise gates, Compressor Limiters Yamaha Grand Piano/Wurlitzer Electric Piano C.S.10 Synthesiser all free Other instruments available for hire

Accommodation by arrangement. Easy parking. Hitchin is approx. 35 miles by road from London just off A1

(VAT and Tape not included) Tel: Hitchin (0462) 35494 (ask for Dave or Bud) or phone for brochure



Premier main agent . Ludwig Percussion Centre Sonor main dealer

Now showing in the Drum Room:

From the U.K. - Premier

From the States - Ludwig

From Germany - Sonor

Plus many more kits and accessories. Pay us a visit or phone Norman Willey,

Part exchanges and credit facilities



Ask about our percussion hire service

NORMANS (BURTON-ON-TRENT) LTD

1 Lightfield Street, Burton-on-Trent, Statts Telephone Burlon (0283) 61528 or 42401.

OVER 1000 ORGANS REDUCED! ORGANS & MOSTNEW

FROM*LOWREY*HAMMOND*KIMBALL *YAMAHA* WURLITZER* CONN *RIHA*CAVENDISH* FARFISA ETC.

AYR Sandgate BANGOR High St BELFAST Fountain St BIRMINGHAM Shopping Centre BIRMINGHAM Corporation St BLACKPOOL Queens Square BOURNEMOUTH Gervis Place BOURNEMOUTH-WAREHOUSE SALES Ringwood Rd Northbourne, BRIDGEND Dunraven Place BRIGHTON North St. CARDIFF Castle Arcade CHUYDON Aiders Dept. Store EXETER Panis St. FAREHAM Shopping Centre GLOUCESTER Northingate St. HAVERFORDWEST Old Bridge, KINGSTON Eden Walk LEWISHAM Riverdale Centre, LIVERPOOL Hanover St. LLANDUDND Moslyn St. LÖNDON Brent Cross Shopping Centre MANCHESTER Arridale Centre, MANCHESTER Deansgate Kendal-Milne MERTHYR TYDFIL High St. MILTON-KEYNES Shopping Centre NEWPORT Emlyn Square NORTHAMPTON Grosvenor Centre, NOTTINGHAM Broad Marsh Shopping Centre, PLYMOUTH Cornwall St. POOLE Arridale Centre PRESTON Fishergate, READING Butts, Centre, Scherfield The Moor SOUTHAMPTON Above Bar SOUTHSEA Palmerston Rd. TAUNTON The Bridge TORQUAY Union St. TRURO Kenwyn St. WORCESTER Blackfriars Square, WREXHAM Regent St.

OFFERS ARE SUBJECT TO A VILABILITY

REDUCTIONS ARE FROM THE LIST PRICE

Access, Barclaycard, American Express, Diners Club.

LONDON **MICROPHONE** CENTRE

SHURE

515SA Unidyne B (PA) Hi	.£20,99
\$15SB Unidyne B (PA) Lo	£20.99
588SA Unisphere 8 (PA) Hi	£27.99
588SB Unisphere B (PA) Lo	
545D Unidyne III (PA) Hi/Lo	£45.50
565D Unisphere I (PA) Hi/Lo	£50.75
SM57 Professional (ST+PA) Lo.	
SM58 Professional (ST+PA) Lo.	€69.90

AKG

D12E Bass Mic (\$T/PA)	£82.29
D330 EBT Stage Vocal	
D320 EB PA/Vocal	
D310E PA	
D190E PA/Gen Purpose	
D1200E (ST/PA)	
0202ES (ST/PA)	
D170E PA/Vocal/Gen Purpose.	
D2000E Stage Vocal	

BEYER

M160 Double Ribbon	£165.00
M201 (PA/ST)	£75.00
M260 Hypercardioid (PA/ST)	£76.59
M400C Stage Vocal	
M101	

EQUALIZERS





Soundcraftsmen full range MXR (2×10) (2×15). 1×31

Technics SH8010 (2×5). Pace SR271×27 Band. Trident Parametric

WOLLENSAK



High quality, high speed Cassette **Duplicators** Mono and Stereo versions. Pop in for a demo Sony also stocked.

Amcron Range Stocked

Come in anytime for a Demo. Off the Shelf.

TEAC



Teac A-3440. Symul Sync 71/2+15 ips. Phone for details.

MIXERS



Largest Selection in Europe. A+H, Tascam, Alice, HH, Canary, Soundcraft, September Sound, Studiomaster Come in and browse.

REVOX



The Leader — in stock now. Phone for a quote.

Ampex Tape at silly prices Full Range of accessories always in stock.

LONDON **CHASSIS** SPE4KER

CELESTION

OFFEDITOR	
G10/60 10in Lead Guitar	£15.37
G12/65 12in Lead Guitar	£18.40
G12/65 12in Twin Cone PA	£17.74
G12/100 12in Lead+Bass	
Guiter	£23.00
G15/100 15in Guitar-Organ PA	
G18/200 18in Bass Organ	
P'Cell 12in Guitar PA	
P'Cell 15in Bass Organ PA	
MH500 Horn 50 Watt	
MH500 Horn 100 Watt	
minous morn 100 mail	.107.00

H/H	
PL50 12in Guitar	£21.83
PL65 12in Guitar	£23.43
PL80 12in Guitar	£26.10
1200 12in Guitar/PA	£63.78
1500 15in Guitar Bass/PA	£74.43
DC80 12in Twin Cone	£27.47
B15 15in Bass	£39.93
HF200 Bullit Tweeter	£35.67
RH450 Radial Horn	£48.45
CD400 Driver 50 Watt	£43.60

FANE	
Classic 55 12in Guitar	£17.80
Classic 150 15in Bass/PA	£39.00
Disco 100/2 Disco/PA	£29.60
Guitar 80L Guitar	£27.05
J104 Hi Horns	£16.10
X/0 Units	

IRI

£98.0
£120.00
£125.00
£135.00
£170.00

PIEZO

Horn Tweeters	£6.50
Also Stocked: Gauss EV. ATC	. Goodmans
BOSE PA IN STOCK O	N DEMO
LIHER PORTARI	F

RECORDERS



4200 Monitor Stereo 1/2 Track. 4400 Monitor Stereo 1/4 Track CR240 Portable Cassette. CR240AV Audio Visual Version Available.

WEST END

Beat these Prices i.e.
IC100L Top£169.00
VS Musician£173.00
Stereo 8XLR Mixer £355.00
HH Mosfet Amps:
V150 Mono 150 Watts.
V200 2×100 Watts.
V500 2×250 Watts.
V800 2×400 Watts.
Pro Series Speakers:
Pro 100 100 Watt.
Pro 150 150 Watt.
Pro 200 200 Watt.
FULL RANGE OF EFFECTS IN
STOCK



8 TRACKS 1/2 in. or 1 in.

Tascam 80/8 ¼in. 8 Track. Brenell 1in. 8 Track, Full AHB Package Available from

Stock. STOP PRESS: 16 Track Tascam Now Available!

NETITRIK Blugs and Sockets

TALE OF LUIN LINES SUG 200K	ets
NC3 MC	£1.20
NC3 FC	£1.40
NC3 MP	£0.90
NC3 FP	£1.70
NC3 MC Gold End	£1.40
NC3 FC Gold End	£1.60
Quantity discounts	•

Amplifiers
HH\$500D. Quad 303 & 405. JPS High
Power Amps. Soundcraftsmen MA5002 & PASÓO1. Bose.

Plus Echoes, Phasers, Flangers, Limiters, Noise Reducers, Expanders, Mix-Downs, Mic Stands, Cable Drums, Disco Gear. Chassis Speakers, Studio Monitors, Headphones, Demags, Splicers etc.

PRO-AUDIO & DISCO: 114-116 Charing Cross Road, WC2. 01-836 2372/7851.

Europe's largest Pro Audio store.

Tax Free Export and Express Mail Order.



Now you can have the essential functions and flexibility of multitrack recording in one compact, self contained unit. It's called the Model 144 Porta-Studio and it lets you record basic tracks, overdub in sync and remix to stereo. On standard cassette tape.

TEAC engineers created a totally unique format for Porta-Studio. Four tracks in sync on cassette tape at 3¾ ips. It's fast, simple, reliable and economical. Rehearse on it. Learn on it. Create on it. Just plug in a microphone or instrument and go to work

on it.
Porta-Studio's versatile
4×2 mixer section gives
you mic/line/tape
switching, trim control,
high and low EQ, fader,
pan and Aux Send for each
input. The failsafe group
switching matrix lets you
record on up to two tracks
at the same time. And
there's a master fader
that gives you overall level
control during recording
and mixdown.

The full-logic cue system in Porta-Studio lets you hear everything you're

doing all the time. Input and tape cueing, monitoring for recording or mixdown are all available. And every signal can be metered. Coming or going.

or going.
Porta-Studio's drive system is built specifically for the rugged needs of multitrack recording. Transport controls are all soleniod-operated for faster, easier switching. And you get a built-in variable speed control that lets you add special effects, fix a flat note or solve timing and cueing problems.

You can work with
Porta-Studio using
nothing more than
headphones. Or send the
output through your home
audio system. You'll also
find the patch points and
controls that let you use
Porta-Studio with
equipment like echo or
delay units, equalizers
and additional mixers.

Come in to REW for a demonstration of the very affordable Porta-Studio. Nothing else in the world puts so much multitrack function into a small package.

A major breakthrough for Recording and Amplifying Acquistic Sound board Instruments Wednesday of the state o

The unique qualities of a condenser microphone are now available in this superbly designed, highly sensitive, flat response *contact* mic.

MAGNASOUND GIVES YOU -

- an exciting new option for amplifying and recording pianos, acoustic guitars, harps, harpsichords, string basses, banjos.
- + 25db separation over open mikes, without loss of quality.
- superb stereo for acoustic keyboard instruments, using two units.
- 48 VDC Phantom Power or built-in battery power from its own specially designed D.I. Box, giving a choice of balanced mike level output direct into mixer from XLR socket, or Jack to Jack connection direct into Amps, with unbalanced output.
- more edge, definition and punch than most open mikes can give you.

Send for detailed brochure and Demonstration Cassette and let your ears decide.

MAGNASOUND CONTACT CONDENSER MIC.



D.I.Tapes Ltd, 107 Park Street, London W1Y 3TA

		-
ATT.		
(87	> C	
•	• -	

Please send me further information, technical data and demo cassette of the MAGNASOUND in action. I enclose £1.50 or \$3.00 for postage and handling.	O/

NAME	
ADDRESS_	

Post to: D.I.Tapes Ltd, 107 Park Street, London W1Y 3TA (Deeler & Distributor enquiries welcomed)







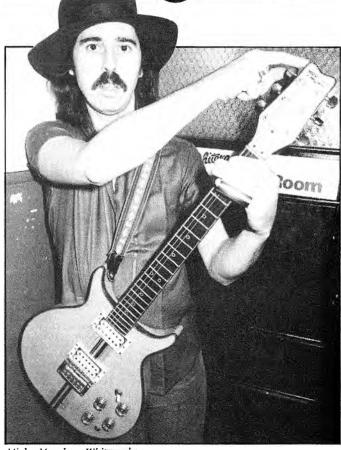
A New Division Is Born

Brodr. Jorgensen (UK) Ltd. has formed a new division: BJ Frets. BJ Frets is responsible for marketing the high quality guitars made by Washburn and Kramer and its formation is unquestionably a major event on the British music scene. Both these names have a background of success in the demanding American market and the quitars that bear them represent a degree of craftsmanship and instrument technology that is unusual even by today's standards.

Brodr. Jorgensen is an established name in the music industry, and BJ Frets will maintain the integrity and service back-up that has made the reputation of the parent company. In addition, it will be staffed excusively by men who speak the language of guitarists. Dave Green, the Sales Manager, has had wide and varied experience in building guitars, collecting and restoring early American guitars, playing guitar professionally, and working with other musicians as a recording engineer and producer. He

has surrounded himself with like-minded people and comments: 'The products are exactly right, and we have got the sales and service to match them. We're offering instruments of quality and personality backed by imaginative American designers and extensive research. Everyone at BJ Frets has a solid grounding in fretted instrument technology. Also, we are all guitar players.'

Already reaction to the new division from musicians and retailers has been enthusiastic. Retailers welcome the dramatic increase in sales represented by the popular Kramer and Washburn lines, Musicians welcome a company committed to intelligent assessment of their needs and continual liaison. Leading guitarists are working continuously with Frets management on product development. Moreover, dealers and players alike appreciate a distributor who attaches as much importance to quality control and 'setting up' as this one does. A separate section of the Brentford premises is devoted to these aspects of the company under the direction of Mike Baron, Each guitar is inspected and adjusted to the extent that it is 'almost customized', in Mike's words, by the time it



Micky Moody - Whitesnake

leaves the warehouse.

BJ Frets is approaching its task as a young, enthuasiastic division with justifiably expansive plans for the future, but managerial pólicy is at the same time centred very much on the individual guitar and the individual customer. Dave Green's attitude is summed up by the following statement:

'If every musician who buys a Washburn or a Kramer recognises the care and attention to detail that has gone into his instrument both in construction and at the setting up stage and feels we've given him an excellent deal in terms of

price, then we'll consider we're doing well.'

It is of interest to note that Washburn, for example, is one of the few guitars produced in Japan by its own exclusive factory, rather than by a factory sub-contracted for the purpose. The standards that operate at the factory of origin are matched by the standards at BJ Frets itself. The new division can handle a demand that is large and continually growing, and still give individual attention. They are proud to be associated with bringing to Britain what can only be called today's great guitars.



Mick Box - Uriah Heep

The Washburn Performers

Micky Moody (Whitesnake) Mick Box (Uriah Heep) Stan Webb (Stan Webb's Chicken Shack) Terry Britten (Cliff Richard Band/B A Robertson) Nancy Wilson (Heart) Randy Hansen (Randy Hansen Band) John Sioman (Uriah Heep)





The Wing series of electric guitars were the Washburn idea of what an electric guitar ought to be, founded on more than 100 years of instrument-making experience.

They all have individual names, which accounts in part for their success because people tend to identify with names much better than just letters or numbers. You only have to look at the guitars that have been major sellers over the past fifteen years — Les Pauls, Stratocasters, etc. to see that a common link is that they all have an identity.

Opting for a well-tried body shape and conventional overall ap-

The Raven
Solid Mahogany Body
1-piece Mahogany Bolt-on neck
Rosewood Fingerboard
Strings attached through back of body
Brass saddles
Wine red, black, or tobacco sunburst finish
The Scavenger
Bass version of Raven with single P-bass type pickup.
The Falcon
Solid Ash body, carved rosewood or maple arch-top

Neck-through-body construction Bound abony fingerboard with polished jumbo frets

5-piece rock maple and rosewood neck

pearance, the designers of the Wing series went straight for essentials. The standard of construction had to be second to none with a degree of precision that had seldom previously been seen in instrument woodworking. Timbers and materials were selected to optimize playing characteristics and sustain, and different models were produced so that the needs of all musicians could be catered for. Finally, sound conscious as only makers of top quality acoustic instruments can be, Washburn insisted on the very finest of purpose-built electrics and electronics.

Brass bridge and nut
Strings attached through back of body
Washburn 'Power Sustain' humbuckers
Coil disconnect switches built into volume controls
Rosewood/maple, antique sunburst, cherry sunburst gold top

Solid ash body with carved arch-top 3-piece rock maple and rosewood neck Neck-through-body construction Polished rosewood fingerboard with jumbo frets Brass bridge and nut

Strings attached through back of body
Washburn 'Power Sustain' humbuckers

The Eagle The Falcan

Wine red, grained brown, or tobacco sunburst finishes

The Eagle

Limited edition custom version of the Falcon with top quality wood, gold plated hardward. Mother-of-Pearl wing-shaped fingerboard inlays, or brass ringlets. Finishes: Black with Abalone trim, White with Abalone trim, natural flame maple top or cherry sunburst on flame maple top. Body and fingerboard bound in brass.

All models available in left-hand

The Stage Series — Performance guitars

The Washburn stage series reflects the drama, the panache, and the electricity of modern music. Don't bother with them if your act tends to be pedestrian—these Washburns are design-

ed for the fast-playing, hardhitting rock'n'roll guitarist who wants his instrument to have a bit of style without compromising its sound potential and playability. The powerful pickups are excellent for distortion playing and, 'dirty' or clean, a Stage guitar gives the versatility you need. Remember — these guitars are made to be seen in fast company!

A-20 Stage Guitar
*2-piece bookmatched flame
maple top
*All-black finish with
brass binding

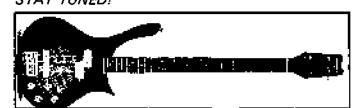
*Neck-through-body construction

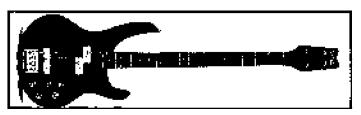
*Split-coil sound

*Version available with 'Strat-type' vibrato.

B-202 Stage Bass
Similar style and
construction to A-20,
but using one P-bass and one J-bass pickup.

STOP PRESS TWO NEW BASSES FROM WASHBURN WILL BE AVAILABLE IN THE AUTUMN. STAY TUNED!





A hundred years of Washburn



When George Washburn Lyon began making musical instruments in Chicago just over a century ago, mass production hadn't been invented. The only way for a luthier to make a guitar was for him to sit down and create every piece of the instrument himself.

Times certainly have changed, but the way a Washburn is constructed has not. Every product adheres to the same basic principle which George Washburn initiated in 1876...hand-made quality. This principle resulted in "first place" awards at Music Expositions held throughout the world. Today, the challenge for the Washburn company is to maintain a high quality, hand-crafted instrument in the face of increasing pressure for mass production needed to meet the evergrowing demand.

This challenge was accepted by an enterprising guitar maker, Rudy Schlacher, and a professional musician, Rick Johnstone. Realizing the need for quality, reasonably priced guitars, banjos and mandolins, the partners took over and expanded the Washburn Company.

The new Washburns have

been completely redesigned to meet the exacting demands of to-day's musicians. Over the last twenty years Japan has become the home of fine craftsmanship for many products, including musical instruments. All the Washburn designs are now translated by Japan's most experienced craftsmen, thus assuring the consistent quality and workmanship for which they are known.

The complete Washburn line provides over sixty models designed for amateur as well as professional musicians. From classic to electric, from banjo to mandolin, each instrument offers the same tradition and quality which has made Washburn world-famous.

Whichever Washburn model you purchase, you're buying more than one hundred years of instrument-making history.

'Festivals' Come To Town

Acoustic Electric guitar players take note. The new Washburn Festival series guitars are rather unique, because they are designed to perform equally well without bias towards either the acoustic or the electric mode. Needless to say, whether you're plugged in or playing acoustically the sound is what you would expect from a Washburn, since the guitars are carefully crafted in selected timbers and have a revolutionary high output pickup system which minimizes string noise and feedback problems without the need for a pre-amp.

There are three models of the Festival: the **EA-40 Woodstock** (6 or 12-string), a shallow-bodied all-mahogany guitar with Tobacco Sunburst or Wine Red finishes, the **EA-44 Monterey** (6 or 12-string) with shallow body, solid spruce top in Natural or Tobacco Sunburst finish, laminated rosewood back and sides and the **EA-45 Tanglewood** (6 or 12-string) with deep body, solid spruce top in Natural or Tobacco Sunburst finish, laminated rosewood back and sides.

The range offers varying degrees of volume, bass, and projection according to which model you choose, and the trade marks of these guitars include conveniently placed volume and EQ pots, compensated saddle, characteristic oval, sound hole plus full length arched back and Florentine cut-away.

The Festivals are competitively priced and will make a considerable impression in the UK. At the moment some musicians may have to wait before acquiring one. The first consignment, due for import in August, will be strictly limited. BJ Frets apologise in advance for any disappointment, and intend to make it up with future monthly consignments.





Washburn Acoustics — They Still Lead

Originally made in Chicago, the name 'George Washburn' has been recognised as a tradition in quality stringed instruments since 1876. Hand-crafting and meticulous workmanship have long made Washburn one of the benchmarks by which fine fretted instruments are measured.

Today, the Washburn Dreadnoughts, Flat Tops and Grand Concert guitars are still made to standards of which the original George Washburn, with his traditional tools and painstaking techniques, would have approved. The designs have changed to suit the demands of today's guitarists, and the volume of business has changed with output measured in hundreds of guitars rather than 'one-offs'. But the standards have not been altered, except where modern techniques could improve a particular feature. The materials, also, are selected with as much care as George Washburn himself would have exercised, with unusually widespread use of solid wood. An important aspect of a good acoustic guitar is that it matures and improves with age, and it is a matter of pride with the company that instruments currently being made will be as structurally sound and musically sensitive in fifty years, as their counterparts made fifty years ago are now.

The acoustic guitar series includes the D 15, D-15M, D-25, and D-25 12-string Dreadnoughts, and the small-bodied F-15 folk-shaped guitar. There is also the Washburn Solid Wood range with names like the Timber Ridge Custom and the Prairie Song Custom evoking what these guitars are about: they are personalized instruments intended to become very much a part of your music.

Kramer

The most popular guitars of the '60s and '70s were designed, except for a few variations, in the '50s. But the signs are that many musicians of the coming decade are going to favour an '80s guitar, in every sense. A guitar for an age of high technology and fine-tolerance specifications. A guitar for music demanding precision and power in lead and rhythm work. In short, a Kramer.

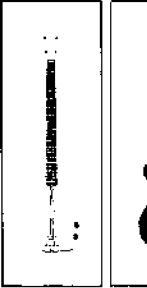
The story of Kramer began just four years ago when Dennis Berardi, a New York musical instrument retailer who had made a first-hand study of what guitarists wanted from their instruments, decided, literally, to take the concept of the electric guitar back to the drawing board.

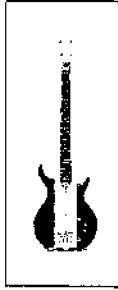
The massive success of the Kramer guitar line revolves around the patented forged aluminium 'T' neck with wood inlays. The design creates a neck that cannot warp but still has the warm, comfortable feel of wood.

The Kramer guitar was presented to the world as an entirely new concept, and to judge by its reception, the world had been waiting for it,

After the prototypes had generated such interest, the new instrument was brought into large-scale production by Peter LaPlaca, who joined the Kramer company from Norlin music. Peter saw the product as a challenge to take a guitar with a specification that would normally have confined it to just a few very rich and very discerning professionals, and produce and market it at a price that would put it within reach of any serious guitarist. From the start, this object was achieved and from the first production

models to the DMZ Custom models that are currently so popular, Kramer have demonstrated that perfection is accessible.





DMZ-4001 Bass DMZ-6000 Bass

The DMZ 6000G/B

DMZ Custom Limited Production Series

The DMZ 6000G guitar and 6000B bass are precision built Kramers with DBL TM Electronics...not just a treble, bass, or power booster but a true active system designed with the musician in mind. Features:

- Volume and tone controls are totally independent and noninteractive
- With volume at max, the guitars' output is double that of a non-preamped guitar
- The tone control actually provides control of treble gain as well as attenuation

- Low impedance output gives ability to drive long lines without worry of hum or radio interference pickup
- Guitar output can directly drive high impedance headphones for private practice or tune-up
- Effects devices work more efficiently because they receive a larger signal
- Original "sound" of guitar is not lost. By setting all controls at "5" the preamp has no noticeable affect on the sound
- State-of-the-art circuitry provides long battery life (estimated 350-400 playing hours)

The DMZ 4001

'the first bass with real precision' features:

- 'Dead spot' eliminating design
- Aluminium neck cannot warp
- Stepped body joint for access to top frets
- High Performance DiMarzio
 P-bass pickup punch, power, and clarity with low noise
- BADASS bridge gives ultimate action and intonation control
- Schaller M4 machine heads
- Custom tooled hardware
- Series parallel switch for tone variety
- Contoured body

Neil Murray (Whitesnake) Trevor Bolder (Uriah Heep) Dave Markee (Eric Clapton Band)Michael Rutherford (Genesis) Pete Briquette (Boomtown Rats) Alan Lancaster (Status Quo) John Deacon (Queen) Patrick Olive (Hot Chocolate) Erik Scott P.M.-(Carl Palmer's band)



Neil Murray (Whitesnake)

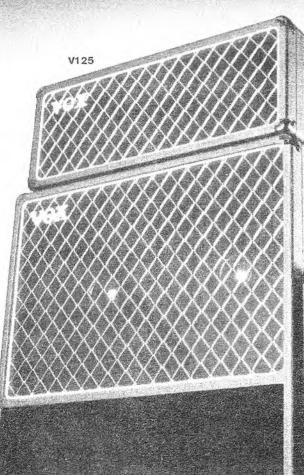


Trevor Bolder (Uriah Heep)

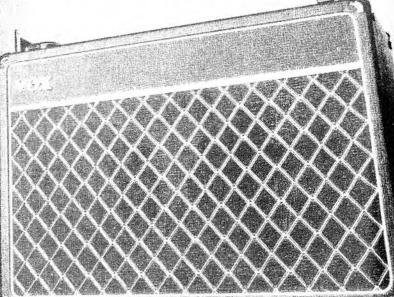
The Kramer Quotes (No. 1)

'All Kramer products have an evenness of response and a quality of tone that makes them ideal for studio use. In particular the 4001 delivers a great sound for any style with the minimum of studio "doctoring". This means less time and less money spent. Kramer are my first choice any time' — Pip Williams, top record producer of such varied sounds as Status Quo and the Moody Blues.

All enquiries to BJ Frets, Brodr. Jorgensen (UK) Ltd., Great West Trading Estate, 983 Great West Rd., Brentford, Middlesex. Tel: 01 568 4578 Telex 934470



AIValve AIVOX



VR212

The all new Vox V15 Combo is the product of Vox experience and the needs of the 1980 musician. It's all valve, of course, for that unique warm overload sound. The twin speaker design is unusual in a 15 Watt Combo, but essential to fully express the potential of the amplifier design.

It's size is only 63 × 46 × 22 × cms but well balanced for portability, and welghing in at around 14 kilos it won't need much carrying! However nothing is sacrificed in construction and quality — the V1.5 remains true to the Vox tradition!

The all valve design features a classic Vox 'push pull' output stage using EL84 valves, and draws on years of AC30 experience. It will easily exceed 15 Watts RMS, bettering 20 Watts Peak Power. The preamp is all valve too, with preamp volume control, master valume control, and three band passive equalisation — bass, middle and treble.

Tremendous care and patience went into this design. Top rock musicians played prototypes and gave their suggestions — the result a combo for you, the 1980 Vox enthusiast.

New for 1980 is the Vox V125 Lead Stack. It's powerful, versatile, portable and Vox The styling draws on the classical Vox tradition. But 1980 innovations in the design bring to the musician such features as active equalisation in a valve design.

The Vox V1.25 is a true concert amp being powerful enough for the loudest of bands. It will easily produce 1.25 Watts RMS before distortion, and will run 180 Watts Peak, and that's not flat out!

V15

But not every gig needs enormous volume potential. So the Vox V125 includes a master volume control to limit that powerful output stage to the level that suits you. You can still overload at any volume by using the preamp volume control to wind up the valve front end.

The preamp has another original control — sensitivity. The difference between a cheap pickup and a Di-Marzio X2N is enormous. This new sensitivity control allows you to custom tailor the amps sensitivity to your guitars output — any guitar can drive the Vox V125.

The tone circuit is pure Vox magic. Five bands of active equalisation — the sort only previously found in the best recording studios. With these tone controls you can boost certain tones and cut them — conventional amps only cut. The benefit is incredible tone versatility. You must hear it.

One of the problems of creating an amplifier with such an exceptional performance is to find a cabinet that can do it justice and Vox abandoned traditional 4 × 12 designs as being inadequate for the V125.

The folded bin design of the VR212 provides the full frequency response the V125 needs. Two 12 inch Vox drivers, each rated at 80 Watts, deliver both direct radiated middle and treble, and bass frequencies enhanced by the ported construction. Further advantages are the compact dimensions and light, weight when compared with conventional 4 × 12's.

Check out the new Vox V125 Stack and the V15 Combo. We know you'll like them.



VOX Limited 32-34 Gordon House Road London NW5 1NE Telephone: 01-267 0702

Please send further details on VOX Amplifiers

Name

Address

VAIM 780



Bored with the flotsam of the punk movement, still whining about what a hard life they've got while churning out a motley selection from the Steve Jones' Book of Rejected Guitar Riffs on £600 Gibson Les Pauls through £400 Marshall stacks?

So is John McGeoch. He was getting tired of it as early as 1977. That's why he helped form a new band with Howard Devoto, ex-singer with Manchester's favourite punk group the Buzzcocks. The band was Magazine, and they were different.

They had intelligence, subtlety and imagination as well as the usual ingredients of energy and aggression. And their keyboard player Dave Formula actually dared to use a synthesizer, that most unfashionable of instruments in the anybody-can-pick-up-a-Wooliesguitar-and-play days of '77.

"We certainly welcomed Dave bringing in stuff like that because it gave us much more of a vocabulary," said McGeoch. "There wasn't a master plan, but we were reacting against headbanging because everybody was doing it. The Buzzcocks and the Pistols and a few other bands were the original ones to play like that, and then suddenly every town had about 20 bands all sounding exactly the same. While we were involved in the energy side of things, we didn't just want to sound like the Clash."

John first met Devoto at a punk party in Manchester in early '77. "Punk rock was very young then, and although in London it was about six months older, in Manchester it was still quite a small scene. The only reason i met Howard was because it was a punk party, which was like the 30 punks in Manchester. I was fortunate enough to be one of them." Howard had recently left the Buzzcocks, and a couple of weeks later rang John and "summoned" him. Those first bedroom sessions produced two songs that were to become Magazine classics - "The Light Pours Out of Me", and "Shot By Both Sides".

"The original plan was just to put out a single," explained McGeoch. "But it went so well that we decided to make a go of it and advertised in the local record shop for musicians." Bass player Barry Adamson and drummer Martin Jackson answered the ad, and the group was born (Jackson was to leave through musical dissatisfaction about a year later, to be replaced by John Doyle). There was a keyboard player in the lineup, but things didn't work out, and four months later Dave Formula joined the band.

Said Dave: "I just happened to go down and see about the second gig they did in a Manchester club and feil for the band straight away and thought 'that's the band for me'." Formula was sharing a flat with Martin Hannett, who had produced the Buzzcocks' "Spiral Scratch" EP, and Devoto rang Hannett to ask if he knew any keyboard players. "I'd already said to Martin how much I liked the band and of course it just worked out like a dream."

The first indication that something was astir was the band's debut single, "Shot By Both Sides", produced by Mick Glossop and the band. Based around a spiralling guitar riff, it sounded, like all great singles, as if it was a long forgotten tune from the distant

past that you couldn't quite put your finger on. But the definitive version of the song was yet to come — it was later re-recorded with producer John Leckie for *Real Life*, their debut album.

The follow up single, "Touch and Go", was a let down, saved only by a bizarre version of John Barry's "Goldfinger" on the 'B' side (John Barry is a bit of a cult figure to the band - they open their stage set with a tape of music from a shampoo ad composed by him). It wasn't until Real Life was released that the public could see just how far Magazine had developed. A remarkably mature first album, it took its place alongside other classics such as Television's Marquee Moon and the Banshees' The Scream as one of the finest albums of the late Seventies. It showed more than anything that bands could move away from the basic EAB chord formulas without losing any of the commitment that originally fired punk. There was pessimism and paranoia soaked into the music, a haunting minor chord atmosphere throughout, heightened by Devoto's impressionistic lyrics. "It's so hot in here. What are they trying to hatch?" he asked on the final track, "Parade", as Formula's synthesizer snaked around a mysterious backdrop.

Dave was still living in the same flat as producer Martin Hannett when he wrote 'Parade", "We had a little music room at the back of the flat with lots of gadgets, rhythm boxes, echo units, all sorts of things," explained Formula. "I was messing about with the drum machine and my synthesizer and echo, and the main melody for the intro just came out while we were mucking about. And the actual melody for the song got developed there as well. I was really excited by it, I recorded it and drove round to Howard's place and brought him back and said 'what do you think of this?' I don't know where it came from because it was so different from what we were doing. Howard was very interested, he was right into it. Barry (Adamson) came in on it and helped after the initial idea was there. The pair of us just got the whole song, melody, everything, in about half an afternoon. We were really pleased with it."

The album was recorded at Ridge Farm in Surrey, before it was converted into a recording studio, using the Virgin mobile. Said John, "At the time it was just a soundproofed barn with residential facilities. John Leckie was good for us to do the first album with because he was a bit of a teacher."

Magazine went up to Good Earth studios to record their second album, Secondhand Daylight, with producer Colin Thurston. It was a different sound for the band — down went the guitar in the mix, up went the sophistication — and one that was to lead to a flood of critics' put downs...what Formula calls "the Emperor's new clothes", one leads and the rest follow for fear of seeming unhip.

The new sound wasn't one that was foisted onto the band by the producer, however. McGeoch explained: "We didn't actually want to have heavy soun-

ding guitars all the way through. It was partly due to me that the guitar was down. We really did stretch the studio, we did use lots of effects."

It was probably the opening track on side two, "The Thin Air", which did the most to provoke criticism. It was a slow, atmospheric piece based around synthesizer, similar in mood to some of the music in the Australian film "Picnic at Hanging Rock", although McGeoch, who wrote the piece, has never seen the film. As he observed, "it's a long way from 'Anarchy In The The UK'.

"It was just very unfashionable. Fashion is not the bother, but the reviews bothered us, obviously, especially when it's about something which you feel quite strongly. Just because there's keyboards on something doesn't mean to say it's not hip."

I mentioned to John that I was surprised when I looked at the album's credits and saw that he had written "The Thin Air", which I had naturally assumed had been composed by Dave on his keyboard set-up. "It's just that in Manchester we had a rehearsal studio all to ourselves in a guy's cellar," he explained. "We used to leave all our equipment set up so any time anyone wanted to go in they'd just go down there. One day Barry was with me and we went down there and recorded it. I wrote it on a quitar, and all Dave's keyboards were there, we just messed around and layered it up a bit."

If there was anything disappointing about the album it was not so much to do with the production as some uninspired material, particularly on the first side. Turning the record over was a different matter however. The second side contained two of the band's most inspired cuts to date — the evil sounding "Permafrost", and a piece which veered between haziness and violence, "Back To Nature".

The band had just returned from a tour supporting Patti Smith in Germany

and Belgium when Formula wrote the music for the song, which he reckoned accounted for "a certain Germanic influence". Devoto's lyrics, far from showing a desire to "get back to the land" as the title implies, expressed the opposite. "Howard went on a holiday with our manager for a week's trout fishing in the north of Scotland and he just found himself completely bored by it," said McGeoch. "It was a dreadful week because he was just a town dweller. In the song he was just saying 'what's all the fuss about?"."

The band toured to promote Second-hand Daylight and then, as far as British fans were concerned, they disappeared. No records...no concerts...no interviews. It was as if the world had gone into an alternative universe in which a rock band called Magazine just didn't figure. The truth was a bit more mundane — they were busy touring in Europe and the States. They were well received in Belgium and France, where they had already done some groundwork, but in America their music was only known in some of the big cities.

"We were playing small clubs, people would come to see us because we were an English band without knowing our music. But we were getting applause, which made us happy, of course," said McGeoch.

Some of the American kids were so. keen to get away from their normal FM diet of Styx and Foreigner that they went right over the top...like pogoing to the plodding tempo of 'Permafrost', for example! And then there was the 'First Church of Howard' in Cleveland, Ohio, run by "this really loopy girl called Mom," Howard and John visited the girl's flat to find it had been made into a virtual shrine to Magazine. "There was her and about three of her followers," said John. "A girl came up to me and went like this"...McGeoch slowly reached out and touched my sleeve in mock wonder. "I must say that it wasn't 100 per cent serious. They were just like real fans with a fan club called the First Church of Howard."

The year's silence in Britain ended dramatically in the spring of this year. Three new singles were released within a month of each other — "A Song From Under The Floorboards", a version of Siy Stone's "Thank You (Falettin Me Be Mice Elf Agin)" and "Upside Down" — coupled with a new album, The Correct Use of Soap, and a national tour. The American experience seems to have fuelled their creative urge and forced them to think about what direction they are going in.

The new album is by far their roughest, most forceful recording to date, with McGeoch's guitar dominant in the mix. It's definitely a "back to the roots" move, with strong black influences in evidence in places — their choice of a Sly Stone song, for example, and McGeoch's funky guitar riffs on tracks like "Stuck" and "Philadelphia" the names James Brown as an influence, and Dave Formula and Barry

Adamson have also listened to funk). A

change of mood is also in evidence,





away from the gloom and despair of previous recordings towards a new optimism ("I want to burn again" sings Devoto, looking forward to a new love affair).

The raw sound is a result of the band wanting to capture the power of their stage performance on vinyl, and much of the credit must go to producer Martin Hannett. Formula and Adamson had originally wanted to use him on Secondhand Daylight, not just because he was an old mate but also because they had been impressed by his work with Joy Division.

Dave explained: "By this time he was using techniques that most producers in England weren't using. In other words, they were very confident in their own styles and just applied their styles to whatever band they worked with. Whereas Martin was improvising quite a lot in the studio using delay lines and all that, he would never go into a studio without taking an armada of his own equipment. Whatever cost the most, Martin would have it. Before he started to work, the engineer would just think he was a nutcase." McGeoch added: "It was very useful because we recorded most of the third album on a mobile at our rehearsal studio. The mobile is pretty underequipped, it's just got a desk, so Martin brought in his gear, which was good."

Hannett has also stamped his personal approach all over the singles. For example, on stage "Thank You" is filled out with slabs of funky cheap-toned organ but on record Hannett has opted for a more sparse sound. The 'B' sides are interesting too (bar the appallingly pretentious "The Book" on the back of "Thank You") - a new version of "The Light Pours Out of Me" with drumming that sounds like it was recorded on the assembly line at Longbridge, and "Twenty Years Ago", a chugging excursion into PiL territory based on a "jam" between Barry Adamson and John Doyle.

The short gap between the release of the three singles seemed commercial suicide, but the band didn't plan them so much as hit singles as a way of announcing their return.

"I'm sure if we had stuck with 'Floor-boards' we could have at least got into the top 50, because it was just starting to pick up radio play," said Formula. "Of course, as soon as the next one came it dropped back. The reason why they appeared like that was because we had not played in the country for 12 months. To all intents and purposes we had just gone and there were all 'Magazine have just broken up' stories."

Dave Formula's musical career began when he started playing blues harp and joined an R&B band shortly after leaving school. "Eventually they said 'have you ever thought about playing organ?' so they bought me this cheap little organ," he recalled. "The only other band I was involved with before Magazine was another Manchester band called Giro, which was like a pre-punk band. It was a hooligan-dole queue band. There was a lot of energy there, it wasn't formalised,

but it was a good, tight little band, I had two or three months of standing in for people, and then Magazine."

He wasn't really into English music — he listened mainly to German bands like Can and "some good disco" — but things changed when he heard the Sex Pistols for the first time. "I was in Chichester, which must be the most conservative place on the country, and I wanted to get back to Manchester very quickly to see what was happening."

Dave's keyboards set-up has expanded considerably since his early days with a cheapo organ. Nowadays he uses a Yamaha YC 45D organ with modified Leslie speaker, Yamaha electric grand, Yamaha string machine, Roland electric piano-harpsichord with five-band graphic, ARP Odyssey, Roland mixer and various effects pedals. His amps are Yamaha.

John McGeoch's guitar playing is a kick in the face to those who still accuse New Wave musicians of not being able to play their instruments. His playing is imaginative and disciplined, which is rare enough in these days of endless "son of Eric Clapton rides again" guitar solos.

'When I was about 15 or 16 I used to listen to Hendrix and learnt his stuff. As a result of that I'm very conscious of not playing standard rock'n'roll licks, I don't allow myself to do that. But it's almost gone the other way, a humourous thing, I like sticking in rock'n'roll things just as a joke. I don't like blues-style guitar playing simply because everybody does it, he said. "I do work out solos, I don't indulge, I try and write them as melodies almost, not as exhibitions of how good I am at playing guitar. You can look at the guitar visually, a diminished run is a gap of four on the first string, then you move up a fret onto the second string, so you can invent things on the guitar just by drawing lines if you like. I've done that in the past, like on "Motorcade".

John has a very individual, almost wailing, guitar sound, which he achieves using a Yamaha SG1000, a Marshall 50 watt valve combo with master control and volume, and an MXR flanger. He chose the 50 watt Marshall so that he could "wind it up without having too much volume. I took the Marshall speakers out because they're a bit flimsy and put in ATCs, which are PA speakers with very heavy magnets". He likes the MXR flanger because it has a lot of different effects, and has it mounted on a microphone stand, with an extension footswitch on the floor, so he can adjust it between songs without having to grovel about the stage. For sustain he uses an MXR compressor, and his strings are Ernie Ball Super Slinky, gauges 009, 011, 015, 024, 032, 048.

His first ever guitar was "a Woolworth's job", which he used in the usual round of church hall gigs with his first band in Scotland when he was about 15, playing Led Zeppelin and Cream re-hashes. He moved down to London at the age of 16, and then went to study fine art at Manchester Polytechnic. He actually got his degree at the same time as he was playing with

Magazine. "It was quite hectic, because I'd done two tours, a Top of the Pops, an album, and I was in my third year writing my thesis." He bought the Yamaha with the advance the band got when they signed with Virgin, and still thinks that it's "great". Every six months he has the neck reset, since it tends to get chucked around and dropped on tour. One useful feature of the Yamaha is a torque for adjusting each machine head, which allows for fine tuning. He also owns a Les Paul, which he likes, "but it simply doesn't give as good as the Yamaha."

McGeoch also augments certain songs with saxophone, which he learnt when he was sharing a flat with a "mad sax player". John would probably admit he isn't exactly the world's most proficient saxophonist, but it hardly matters since he uses it to add tonal variety to an otherwise all-electric musical diet.

McGeoch was recently offered the chance of joining Siouxsie and the Banshees on a permanent basis after touring and recording with them — it was his ringing guitar work which dominated the band's hit single "Happy House". The Banshees had auditioned literally scores of guitarists, some of whom did not even know the band's material, and they eventually asked John to help them out. Deciding whether to stay with the Banshees or go back to Magazine was one of the most uncomfortable choices that he had ever made. He chose Magazine.

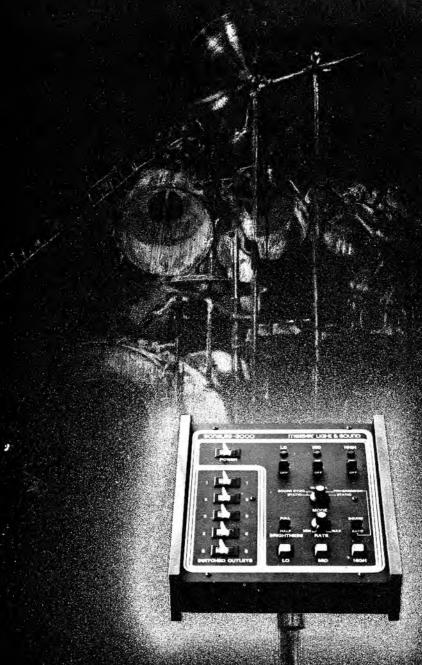
"If the Banshees get a guitarist they are happy with then I'll be happy, but I'd like to work with them again," he said. He had also been asked to play with some other people (he would not elaborate) but "you have to be careful not to just fart around."

John worked on five new songs with the Banshees, "Really I just put the guitar onto songs that they more or less had. Of course I put in my opinion on the arrangements, like any song with Magazine." John wrote the almost neoclassical guitar line on "Happy House" around a bass line and melody worked out by bass player Steve Severin. "It was picked, it was almost like a country pick. I don't use my fingers but I can pick. quickly with a plectrum. The rest was just Em just slid right up." The Banshees unveiled some of the new material on their short tour in spring and it displayed a heavy Eastern influence, particularly the song "Desert Kisses".

"Because they haven't got a John McKay figure writing they're really expanding in different directions," said McGeoch. "Sue's started to play guitar, although I don't think she's going to be a fill-in for a guitarist, and Steve's got a synthesizer. I was quite surprised at how important a part Steve plays, not only in their sound but in their arrangements, 'Switch' and things like that. He's quite a quiet guy until you get to know him, but he's actually very intense in the musical thing."

McGeoch also supplied the guitar on "Christine", the Banshees' follow up to "Happy House".

Now...enhance your live sound with live lighting from Meteor!



METEOR LIGHT and SOUND COMPANY Ideal for live group work, the Meteor Sona-

Please send only	LIGHT and SOL 155 Michael Or, S multiers on	JND COMPANY yours, NY 11791
Projectors Strobes Elfects Mixers Amplifiers Name	Loudspeakers Lighting Controllers Mobile Installations Fixed Installations	Oisco Walls Disco Floors Disco Ceiling
Address Crity	State	Z _I p

155 Michael Drive, Syosset, New York 11791 Lite 3000 combines five separate effect se-Telephone (516) 364-1900. Telex 96-1396. lections with three channel sound-to-light translation. Two light levels, manual individual channel over-ride enabling lights to be 'played,' plus chase functions add up to a powerful lighting package.

> Easily transported, ready for instant use and ruggedly reliable, the Meteor SonaLite 3000 is the ideal mobile lighting choice. See one at your Meteor dealer or complete coupon for further details on the SonaLite 3000 and other Meteor lighting systems and effects.

Dean Markley Stockists

SCOTLAND Magnum Sound, Wishaw, Lagarkshire. Largs, Dundee. Wilkinson Music, Airdrie. Simpsons, Edinburgh. Organ Loft, East Kilbride. McCormacks, Glasgow. Road Show, Bridge of Allen, Stirling.

NORTHERN IRELAND

Matchetts Musical Instruments, Belfast.

Modern Music, Newtonards.

REPUBLIC OF IRELAND J. Raftery & Sons Ltd., Galway. McCullough Piggot Ltd., Dublin 2. McCullough Piggot Ltd., Cork.

ENGLAND

Rock City Music, Newcastle. Music Maker, Carlisle. Wilson Musical Services, Halton, Leeds.

Frank Hessey, Liverpool. The Guitar Player, Rochdale. Yardleys, Birmingham. Honky Tonk Music, Hadleigh, Essex. Soundwave, Romford, Essex. Mr. Music, Bedford. Hadges & Johnson, Chelmsford. Ace Music, Colchester, Essex. K.E.T. Guitars, Hitchin, Herts. Albert Balaam, Bury St. Edmunds. Rose-Morris & Co. Ltd., London W1.

Sounds, London W1. Rhodes Music, London WC2. Boogle Music, London WC2. Maurice Plaquet, London W12. Hilda Pash, London W11 John Beebys, London N8. Blanks Music Store, London NW6.

Alberts Music Shop, Twickenham, Middlesex.

Hammonds, Watford, Herts. Holiday Music, Leytonstone. Harrow Music, Harrow, London NW1. Gig Sounds, Streatham, London SW16.

South Eastern Entertainments, London SE13.

Monster Music, London SW18. Rock Bottom, Croydon. Andertons Music, Guildford, Surrey. Wing Music, Bromley. Dick Middleton Music, Guildford,

Surrey Approximate Music, Worthing. Chandler Guitars, Kew, Surrey. Kennards, Canterbury, Kent. Russells Music, Tunbridge Wells,

Moss Music, Gillingham, Kent. Classical Guitar Centre, Eastbourne,

Sussex. Becketts, Southampton. Kempsters, Swindon, Wilts. Duck Son & Pinker, Bath, Avon. Coast Music, Charminster,

Bournemouth. Marvo Music, Andover, Hants.



Rose, Morris & Co Ltd 32-34, Gordon House Road LONDON NW5 1NE Telephone 01-267 5151

It's Not So Lonely At The Top.

ALICE COOPER BAND
THE BABYS
BAD COMPANY
BILLY COSHAM BAND
BILLY CROSS (BOH DYLAN BAND)
BLACK OAK
CHUCKERAINEY
DAVID KISWINEY

ERIC GALL (STUFF)
HEART

HOYT AXTUN JOHN MAYALL

JOHNNY WINTER KANSAS

UITTLE RIVER BAND THEHOTAH Y.L.OM

ACCLLY BATCERT OUTLAWS PATTRAMERS

PATTRAVERS PAUL JACKSON (FERBIE HANGOCK)

PHILLESH RICK DERRINGER

IK DERRINGER RUSH

SPIRIT

TEASER

THIN MZZY 138 SPUCIAL ALEMBIC COTTARS LADO OF CANADA

Join Us.

Dean Markley

DEAN MARKLEY STRINGS 3350 Scott Blvd. #29 Santa Clare, CA 95051 [408] 988-2456

2/1550 Head Markley Strings

ROCKIN' DOPSIE KING OF ZYDECO

by Paul Ashford

If you had asked the average British musician his opinion of Zydeco music prior to the British 1979 Cambridge Folk Festival, you'd probably have got much the same response as if you asked the average member of the Red Army Choir what he thought of Punk Rock. In most circles, the style was completely unknown.

Now, after seven or eight months, Rockin' Dopsie, the man who took his 'Zydeco Crusade' to Europe, has enjoyed inordinately favorable publicity, excellent reviews, and self-outs on just about every gig he's played. On the morning following a riotous London show — at which I forgot my critical detachment sufficiently to cavort about the floor crushing the feet of people to whom I hadn't even been introduced — I met the "Louisiana Legend" to talk about his unique blend of music.

about his unique blend of music.

The feeling was that of meeting one of the great bluesmen except that there's nothing of the "revival" in the impression Zydeco is making. Does the style have its roots in blues?

"Well, the Zydeco come from the French Cajun, that's where we took it from." Rockin' Dopsie explains. Like some of the other black American singers, his voice has the impression of having been intended for singing and only adapted for talking as an afterthought — in conversation — gruff and growling la contrast to the power and clarity with which he delivers his songs. "The Zydeco came from the French Cajun. I think the French music came from Canada and before that from France, but when the French Cajuns came to the South, that's what they came with. But then the black people took it - we stole it from them you see, but also we 'rranged it. We 'rranged that music and we made the Zydeco, like I play. I play French music in combination with a little jazz, a little rock, a little blues, but the way I play it is moving. It really makes you move because you got that blues in it, that French in it, and that jazz in it all those three types of music at the

The origins were fairly homely, as evidenced by the name.

"Well we named it after a bean, you see. That's how we called it in French, that bean in French is a Zydeco so we called it Zydeco music, that's what we have in the country, you see, back in Louisiana.

"It's been around a lot of years, I s'pose. The one that really started Zydeco music off is Clifton Chenier. He started it off and I picked it up from him. See I was playing like all them French Cajuns was playing, so one day he said 'you know what, you're just beginning to start out at playing but I like your style.' He said, 'I want you to do like I do, play like me, and you're gonna be great.' I never was in a band with him but he's just a good friend of mine and I used to go to his dances and listen to him play Zydeco music and I always didlike that style, how he was mixing up French and blues and jazz, that was fantastick. So you see one day he told me: 'Man, I love your style and you play very well. But you're playing nach'al French you got to make a little boogle in there like I do, and you're gonna be a great musician.' So I said: 'I'm gonna do that.' And I started that and it's working it sure is!"

Clifton would perhaps have been the more famous of the two, except that Rockin' Dopsie was the one that took Cambridge by storm and so is very much in the British limelight. Dopsie feels that as far as style goes, there's nothing to choose between himself and Chenier.

"You can't tell the difference between me an' him cause we play just alike. If you close your eyes or you turn your back and the music is playing, you might say: 'that's Clifton Chenier' and it'll be Rockin' Dopsie all the time. There are only two guys that play that style, we're the only two. We got other musicians, they try but they never can get it together. I guess I was just made to pick it up, you see."

Part of the reason for his affinity with the music was rooted in his early dissatisfaction with the traditional accordion of Cajun music, an instrument that his father played in a dance band. With the accordion growing in popularity in English music (my own opinion, backed





up by a number of unexperienced tualities such as seeing Christina WieVie of Fleetwood Mac wielding chast his comments on his choice of instrument are interesting.

'See, mine is not a French Captin ascordion, I couldn't learn on that one, I was made to play French music but with a different accordion. It's a tipple

accordion. It's a typic accordion. It's a typic accordion. I play, a button triple accordion. I got three rows of keys on the right and the Cajun accordion have one row of keys and it's way smaller. But what I got there is exactly a blues style accordion — you can't play that music on a nach'al French one, they got a pretty sound but they re too small. I'm gonna take my accordion and play the same na take my accordion and play the same song I play on a French accordion and that's different like night and day. They don't sound alike. Cajun French accordon't sound alike. Cajun French accordion is just nach'ral French, you can't mix no blues on that or jazz, you just don't have enough notes to go around and give a taste of this and a taste of that, so you got to just play F so So that's the difference I have on ..., accordingly dion,

For those who have looked in the Hohner catalogue and found nothing listed under "Nach'ral French Accorthe instrument Dopsie describes s very like what the English call a eon, although there's still a wide choose from. You have to order ons like his, Dopsie says, from

Vhat's a really good common accordion is that keyboard like Clifton plays he plays a different accordion than I play

— he plays a keyboard style plane accordion. But you can't get those accordions like I play anywhere 'cause when I was in England last July I went iround shopping to see what accordions they had in the shops. I see'd a lot of keyboards like Clifton play, but I didn't

see no triple accordions at all....'
If the July visit was a disappointment as far as accordion shops were concerned, it was a maisive success in every other respect. He had, in his own words; "been filmous" for 14 years before he tried his music out on English audiences, and his partainly did not expect the reception he got.

"They really liked my style, over here

"They really liked my style, over here. You see I thought well I'm going to England, I'm going to try there, I don't know whether they'll like it but I'm going to try because at least I think they going to listen and see what it sounds like. But they did more than listen - they got into it right away and it was like I'd been here for years. They behaved like they were tamiliar with that music. And I got people saying 'man, it really shakes me up, it makes my skin crawl on me. When you start up that accordion my skin looks like it just wants to jump off!' That's the kind of excitement they got. So that made me put more into it, you

He came to England on a Zydeco Crusade, and he's very enthusiastic about making converts, not only for people to listen to Zydeco, but to play it as well. Mentioning its phenomenal



With 39 years' experience in the design and manufacturing of several hundred thousand transformers we can supply:

Y TRANSFORMERS OF AUDIO FREQUENC

YOU NAME IT! WE MAKE IT! OUR RANGE INCLUDES

Microphone transformers (all types), Microphone Splitter/Combiner, transformers. Input and Output transformers. Direct Injection transformers for Guitars, Multi-Secondary output transformers, Bridging transformers, Line transformers, Line transformers to G.P.O. Isolating Test Specification Tapped impedance matching transformers, Gramophone Pickup transformers, Audio Mixing Desk transformers (all types), Miniature transformers, Microminiature transformers for PCB mounting. Experimental transformers, Ultra low frequency transformers, Ultra linear and other transformers for Valve Amplifiers up to 500 transformers. watts. Inductive Loop Transformers, Smoothing Chokes, Filter inductors, Amplifier to 100 volt line transformers (from a few watts up to 1000 watts), 100 volt line transformers to speakers, Speaker matching transformers (all powers), Column Loudspeaker transformers up to 300 watts or more.

We can design for RECORDING QUALITY, STUDIO QUALITY, HI-FI QUALITY, OR P.A. QUALITY. OUR PRICES ARE HIGHLY COMPETITIVE AND WE SUPPLY LARGE OR SMALL QUANTITIES AND EVEN SINGLE TRANSFORMERS. Many standard types are in stock and normal dispatch times are short and sensible.

OUR CLIENTS COVER A LARGE NUMBER OF BROADCASTING AUTHORITIES, MIXING DESK MANUFACTURERS, RECORDING STUDIOS, HI-FI ENTHUSIASTS, BAND GROUPS, AND PUBLIC ADDRESS FIRMS. Export is a speciality and we have overseas clients in the COMMONWEALTH, E.E.C., USA, MIDDLE EAST, etc.

Send for our questionnaire which, when completed, enables us to post quotation by return.

RAN

Manufacturers and Designers E. A. SOWTER LTD. (Established 1941), Reg. No. England 303990 The Boat Yard, Cullingham Road, Ipswich IP1 2EG Suffolk, P.O. Box 36 Ipswich IP1 2EL, England Phone: 0473 52794 & 0473 219390

popularity in the States, ("going to the Zydeco" being the latest thing there it would seem) he advises anyone wanting to get into music to (literally) jump on the Zydeco band-wagon.

Cause you see, already people are very interested in it over here - really blowing their mind up with that music, See when I be iumping up an' down and the people be jumping up an' down an' hollerin' it just makes me feel I'm back home. Back home that's how they do they dance, they keep jumping and hollering because you know it's that beat we got in there. You could play one of your songs that you have over here and then get one of mine, and that's a different beat. This beat I got here is goin' make you move, you're goin' tap your foot, shake your head, and there's no way you can be quiet ...

But the European visit was more than a tour, even a crusading tour. Part of Dopsie's object was to widen his range of material.

of material.
"You see quite a lot of those songs I write myself, but there's some songs I copy after somebody - but I arrange it and I play it my way because you can't take no other man's song and come up with it just like he got it, just like you can't sell other people's music, you gotta have a kind of your own. So I would take one of BB King, you know, but I arrange it with Zydeco music. I can arrange any song - I have to go around the music stores and buy some of your English records that you all have here and bring them to the States, arrange it, and put Zydeço in it. I don't know exactly which record yet - I'll have to go around those shops and see what I can get, but I could take 'most any one, and then I'm gonna surprise the people from England with their own music in this style so they go: 'Say, I wrote that, I really did, but look it's Zydeco now!'

"Course in France, it's different again because that music came from France and I'm just bringing it back to them with a different style — I put their music and my music together and I think they're gonna make a hurricane. I met a few people from France already and they said 'boy, we wasn't even thinking'...they said 'you're gonna make a killing over there and I'm just packing my suitcase so I can be there when you hit.""

Part of the appeal of Zydeco is undoubtedly the beat — the irresistable push-pull rhythm of the accordion. Has it, however, a message, as blues might be said to have?

Rockin' Dopsie furrows his brow in thought. "Let me put it like this. Blues is like you was hard working man and like you're lonesome, you're very lonely, and you're singin' the blues you know because it's sad, and what you're doin' there is hard, hard work and you're hoping not to work that way all your life. People saying like they do say well I'm a hard-working man, but it won't be like this always. People started the blues and I reckon jazz too in New Orleans, You see I reckon jazz and blues stared in New Orleans, but Zydeco came from France and Canada so we just took it up and put it all together so we could make a



big bean out of it — Zydeco. "Yeah. But Zydeco grow out in the field — you got to be out in a field pullin' a sack or bucket, breakin' them beans, you know — that's what it's all about." He's been through all that himself.

I came from a very poor family. Yes, I've done that with those beans. We were in the country and we used to farm, but I told my mother one day I said: 'Mama, one day I'm gonna set you up pretty so you won't have to do this no mo'.' Well she said: 'Son, I don't know what you're talkin' about.' Well, I said: 'I'm thinkin' about going into Zydeco music' and she told me: 'I hope you all the luck in the world, but I don't see what way you're gonna make it,' I said: "I'm gonna surprise you one of these days.' And believe me it came just like that. My mother's living in a beautiful home, we're living in the city and like everything is beautiful and everytime I think of that I tell my mother, that Zydeco is still working! And she just laugh and says, well, I don't know what got into you but you had a good idea, and I knew you was going to make it because you was very interested. . .

Musically, as domestically, Rockin' Dopsie gives every appearance of being where he wants to be.

"I really started Zydeco in 1953, that was when my first recording was, and I was so excited, man, I nearly caught a heart attack. Zydeco music is really that accordion and that scrub-board and that's how I started, just the two of us for four-five years. That's real Zydeco some pople use this triangle you know but I don't use that I just have the washboard and now I have a saxophone, guitar, bass, and drums - and I do the rest with my accordion. That accordion, you know, it's the Grand-Daddy. I got a good band - the only thing I'm thankin' about is I'm thankin' about getting me a fiddler, that might be a little taste of something new. Yeah, you could mix fiddle with Zydeco, you see that's the way them Cajuns play, and if you get the right accordion and you play French and Zydeco together with that fiddle, man, I think that's goin' to be a big hit. So if I can get me a good fiddler who can really get into it, that's what I'll do, and if you notice how good those fiddlers go with French accordion then it'll be really something else with the Zydeco accordion."

That's the only addition to the band he would consider. He has a son of his own who's "great on Zydeco" and may one day "take my shoes", but just as he never played with Clifton Chenier, Dopsie wouldn't go on stage with his son. It would be a good idea but...

"Two accordions playing together ain't no way. No, that won't work. At least it can sound good but they can't play together, you'll have to play each in turn, I'll play a bit and then I'll have to back up and he'll play a bit — pretty complicated, especially with the kind of music we play."

Which music relies heavily on improvision backed by a very tight rhythm section. It's a spontaneous kind of playing, as Dopsie suggests when he describes the progress, fairly rapid by many standards, of a song from the concept to the performance.

"You see sometimes I'm lying down at night and if I think of a song I have to get up and play that, I dream those things you know - sometimes the whole song comes just like a nightmare, and then I just take my accordion and play it. It may be the Devil. I don't know. but even if it is the Devil I don't care about that. They do say a nightmare is the Devil, don't they? Well, either way it might be midnight, two o'clock and three o'clock but I'm gonna grab my accordion and play that song. Then the next night we got a job, so I tell my boys we got somethin' new tonight, they say what you got? Well, I say, I dreamed up something last night, but they don't know I already played it by myself at home, they say 'boy, you're a devil, you do anything you wanna do.' It works like that, you see, that's the way we always do it, they just come in with the music just like that - we don't have to rehearse. We don't never rehearse, we just play. That's how easy it is to play Zydeco music. You see you shouldn't need to rehearse. I know one band they rehearse two three times a week — I say 'why do you rehearse like that, you ain't getting any better.' Rehearse don't do nothin' - you got to have it in your head - put it into your head and leave it there...

So there you have it. As Zydeco music gets into more and more people's heads, Rockin' Dopsie has accepted a re-invitation to the Cambridge Folk Festival in July, and no doubt that will be the basis of a British if not European tour. A new album which concentrates on Zydeco cover versions of various R&B hits is in the pipeline, and after that Dopsie told me (with the air of a man who'd thought of it two minutes ago) that he plans to put out a further album entitled Zydeco Will Never Die.

"Because music is the one thing. Everything else will go but music will never die. You see Zydeco is something you eats, I mean it's something you grows. It's just beans, you know, and that's why we named it after beans. Because it's always gonna be around..."

THE MARK III SERIES

Finally... Amps as contemporary as your music!

the most advanced and most versatile line of instrument amplification systems on today's market. Until you've experienced playing through a system with the performance and flexibility of these new amplifiers, you can't appreciate all the possibilities of playing an electric instrument. electric instrument.

THE MUSICIAN

- 200 Watts RMS @ 1% THD, 4 Ohms
 Two channels with pre

- and post on each
 Individual channel
 equalization
 Six-band graphic
 equalizer with in/out switches on each
- channel
 AUTOMIX function selects either or both channels with remote
- footswitch

 Channel LED indicators

 Phase with color and rate
- controls
- Master reverb Input preamp, send and return
- Preamp and line outputs
 Power amp input

THE BASS

- 200 Watts RMS @ 1% THD, 4 Ohms
 Two channels with pre and post gain on each
- channel
 Individual channel
 equalization
 Six-band graphic
 equalizer with in/out switches on each channel AUTOMIX function
- selects either or both channels with remote footswitch
- Bi-amping capability with variable crossover
- points
 "DDT" compression
 circuit with LED indicator and in/out switch PARAMID and mid shift
- Paramil and mid sint equalization
 Channel LED indicators
 Preamp and line outputs
 Power amp input









FILE SECTION (SEVANSIE)

- THD, 4 Ohms
 THD, 4 Ohms
 Two channels with pre
 and post gain on each
 channel
 Low, mid and high
 equalization
 PARAMID and mid shift
 controls

- **AUTOMIX** function selects either or both channels with remote
- LED channel indicators
- Master reverb
 Preamp and line outputs
 Power amp input

THE CENTURION

- 130 Watts RMS @ 1% THD, 4 Ohms
 Two channels with pre and post gain on each

- channel
 Individual channel
 equalization
 Parametric equalization
 AUTOMIX function
 selects either or both
 channels with remote
 footswitch
 LED channel indicators
 "DDT" compression
- "DDT" compression circuit with LED indicator and in/out switch
- Preamp and line outputs
 Power amp input

These features give you an indication of the Mark III Series' versatility and performance, but specs and features mean little unless you can plug-in and experience for yourself. See your Peavey dealer for a demonstration, he'll show you why unbelievable values are still a reality with values are still a reality with



PEAVEY ELECTRONICS 711 A Street Meridian, MS 39301

"The Company That's Doing It."

Lab Series.

12 . 4 . 1 7

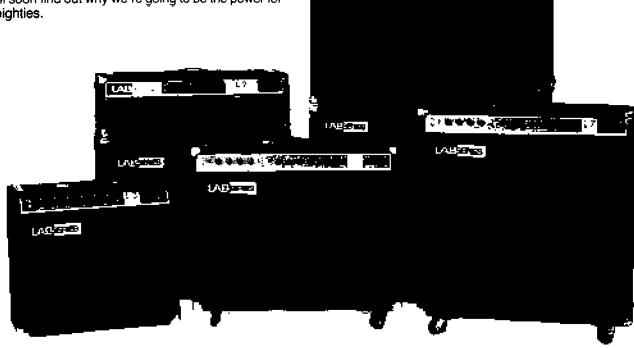
JUNEAU PROPERTY

LARY S

The science of success.

A year ago, Lab Series wasn't exactly the name on everyone's lips. Now though, with the accolades received from players and press alike and a nationwide network of nearly fifty highly professional music stores, Lab Series looks like becoming the biggest thing in amplification since Joshua did his Jericho gig.

Check out a Lab Series amp at your nearest stockist. You'll soon find out why we're going to be the power for the eighties.



DUDLEY, W. Midlands.
Rock Shop.
201 Stourbridge Road. Holly Halt.
Tel: 0384 74700
EASTBOUNDE, Sussex.
Cass Music.
29 South Street.
Tel: 0323 37273
FLEET, Hants.
Kings Road.
Tel: 02514 21210
GREAT YARIMOUTH, Norfolk
Allens Music.
22 Broad Row.
Tel: 02514 21210
GREAT YARIMOUTH, Norfolk
Allens Music.
22 Broad Row.
Tel: 0493 2887
GUILDFORD, Surrey.
Dick Middleton Music.
Ouarry Street.
Tel: 0483 34537
HULL.
J.P. Cornell.
J.P. Cornell.
J.P. Cornell.
Street.
Tel: 0482 227162
SLE OF MAN, Douglas
Music Box.
56 Strand Street.
Tel: 0624-22540
LANCASTER, Lancs
Hoobs Music.
Mary Street.
Tel: 0524 466431
LEEDS, W. Yorks.
R. S. Kitchen Ltd.
29-31 Queen Victoria Street.
Tel: 0524 466431
LEIGH-ON-SEA, Essex
Tim Gentle Music.
1420 London Road.
Tel: 0702 72926

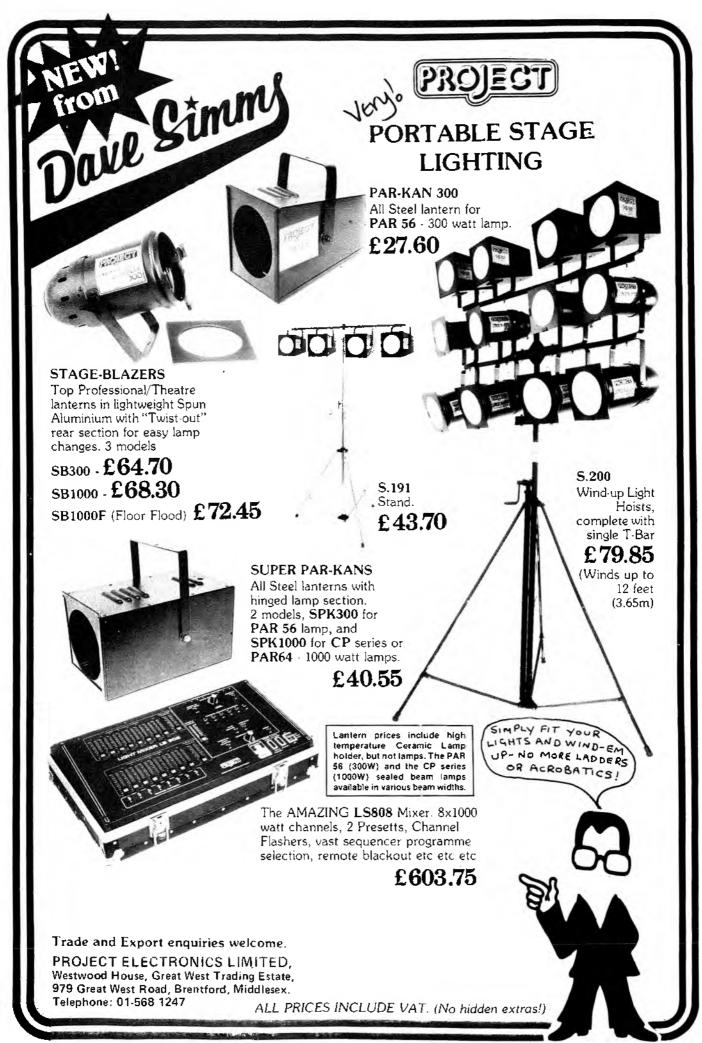
WORCESTER.
Worcester Music,
5-7 Bull Entry,
Tel: 0905 20279
LIVERPOOL.
Rushworth's Music House,
Whitechapel.
Tel 051-709 9071
LUTON, Beds.
Luton Music Centre.
114 Leagrave Road.
Tel 0522 26826
MAIDSTONE, Kent.
Sharon Music.
85 High Street.
Tel 0622 61649
MANCHESTER.
Highway Music.
Deansgaler.
Tel: 061-833 00328
London Synthesiser Centre.
60 Oldham Street.
Tel: 061-833 0038
London Synthesiser Centre.
182-184 Chesterfield Road North.
Tel: 0623 26976
REDDITCH, Worcs
Pied Piper.
1-2 Market Place,
Tel: 0527 64333
SHREWSBURY, Salop
Salop Music Centre.
Lond 1, Town Walls.
Tel: 0743 64111
TAUNTON, Somersel
Quist Amplitication.
102 Station Road.
Tel: 0632 71270

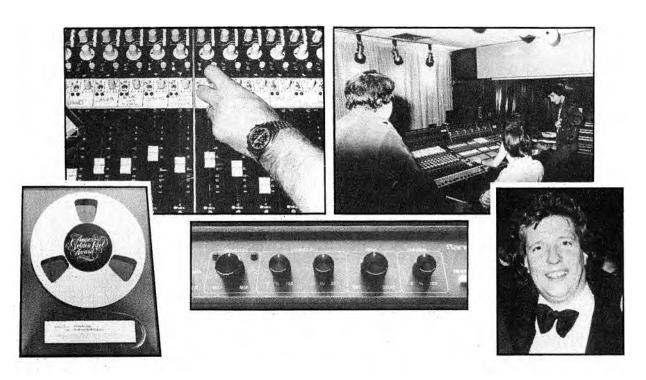
TORQUAY, Devon
Guitar Bar (City Electronics).
64 Market Street.
fel: 0803 25488
WATFORD, Herts
Hammonds of Watford.
161-165 High Street.
Tel 0923 39733
Scotland:
DUNIDEE.
JT Forbes.
89 Nethergate.
1el: 0382 233352

DUNDEE.
JT Forbes.
89 Nethergate.
75 Nethergate.
75

London:
LONDON W.C.2
F.D. & H. Music.
138-140 Charing Cross Road.
Tel: 01-836 4766
LONDON N.W.2
Julian's Retail instruments Ltd...
2 Churchill Road.
Tel: 01-459 7294
LONDON E.12
J60 Music Bar.
445 High Street North. Manor Park.
Tel: 01-472 5107
LONDON N.W.1
London Synthesiser Centre.
22 Chalton Street.
22 Chalton Street.
Off Euston Road.
Tel: 01-387 7449
LONDON N.W.6
Melbourne Planos.
213 Kilburn High Road.
Tel: 01-386 4366
LONDON W.C.2
Rhodes Music.
Dermark Street.
Tel: 01-836 4556
LONDON W.1
Rose-Morris.
Shaftesbury Avenue.
Tel: 01-437 2211
LONDON S.E.13
South Eastern Entertainments.
398 Lewisham High Street.
Tel: 01-838 4565







CONTENTS

112 Recording In The Eighties — Editing

Jimmy Douglass tells you how to wield a judicious razor blade

115 Ampex Golden Reel Award Janet Angus explains what the award is all about

118 The Producers — Roy Thomas-Baker The man behind the Queen sound holds court

121 MXR Flanger/Doubler

124 Furman Reverb unit

127 Studio news and products

Keith Spencer-Allen's round up of the latest goodies for the recording world

130 Studio of the Month

R. G. Jones Studios of Wimbledon



It all started with an idea: build a professional sound reinforcement system that would knock your socks off, yet survive the rigors of the road.

Now we don't want to leave you barefoot, but we do want to make an impact on your ears... and your performance. Stanley Screamers do just that.

How'd they come about? Stan Miller of Stanal Sound Ltd. developed the concept. Then Altec Lansing took that concept and breathed life into it, creating the Stanley Screamers—state-of-the-art in sound reinforcement!

There are eleven models in all, from the small slope monitor to the huge dual sub-woofer system, with everything in between.

Features? How's Altec Lansing's latest: Mantaray horns, Tangerine Radial Phase Plugs and LF Series Loudspeakers! Three reasons why the Screamers blow away their competition.

Plus they're super-rugged. Built from non-resonant plywood, covered with fiberglass—they're impervious to ham-fisted roadies and cross-country tours.

What else makes Stanley Screamers special? The company they keep! Stan and the Screamers have backed such folks as Neil Diamond, John Denver and Pink Floyd, to name just three.

Stanley Screamers...they're one tough act to follow.

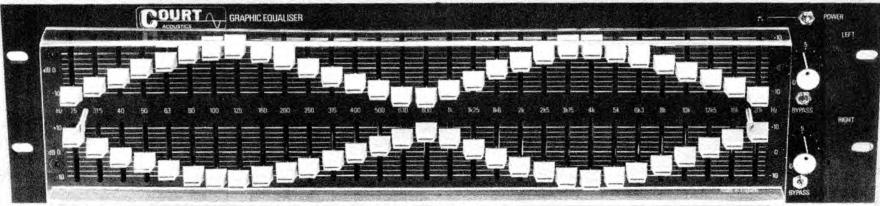
For more information on Stanley Screamers Loudspeaker Systems for Entertainers, write: Stanley Screamers, P.O. Box 4730, Anaheim, CA, U.S.A. 92803.			
Name			
Address			
CityCountry			
Telephone			

ALTEC CORPORATION



The Ultimate Equaliser





- 2 Stereo bands of 30 faders with centre click stops giving 20db of control
- Entire audio spectrum from 21hz to 21khz in 1/3 octaves
- Up to 20db of gain
- High and Low pass filter on end faders for subsonic and supersonic rejection
- ± 10db of boost and cut, or 20db 'all cut' and 'all boost' with flat response

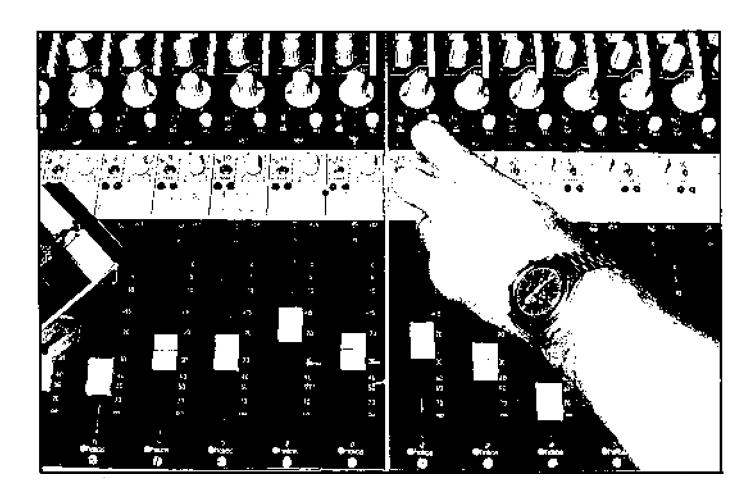
- Plug in balancing transformers
- 60 Precision inductors with minimally flat response for maximum curve performance
- Passive bypass for accurate pre & post eq. comparison
- Perspex 'Tamper-Proof' cover
- 100-240 volt operation in 51/4" rack space



35 Britannia Row, London N18QH 🦿 01-359 0956 Telex 268279 Attn. BRITRO G

Studio Recording for the 80's

EDITING



Many artists, producers and record companies seek our particular engineers because they "get a great sound" or they "do amazing mixes." They rarely ever search the country to find an engineer who "does great edits," yet often during those "great sound" and "amazing mix" sessions, there are always edits to be made. Just as any competent photographer must know how to crop his pictures, a good engineer has to be good at editing and be creative as well.

Editing is seemingly the most important/unimportant function of the recording chain. A function that takes place between every step of making a record. It is even a factor after the record has been made.

Editing is most commonly

viewed as a process used to shorten a long tune which might be quite suitable for album play — 4½ minutes up to 25 minutes, which is about as much as the best cut disc will hold — down to a single 45 rpm radio airplay time (3:00-3:40 min average). Most of the time this is done in a fairly straightforward fashion: Intro, Verse, Chorus, Verse, Chorus, Bridge, Chorus, Fade, and is theoretically a fairly simple task.

I tend to place various types of editing into two general categories. The first I call "Editing For Work" because, when you have to shorten or rearrange a poor tune or performance, it's work. In the end some of the editing cuts may help a little, but it usually ends up strengthening the realization of the painful reality that a

bad record is still a bad record.

You're involved in a session and you're laying down the basic tracks on a multi-track tape. A musicían decides to stop eight bars into the fade not very much time for the snger to ad lib - because he didn't feel that the take was 'happening." And of course everyone else on the track follows suit and stops playing because somebody has obviously dropped out. After five or six hours and twenty odd takes, the producer feels this was, in fact, the "magic" take. Crisis? Not really. You try another take and this time the guilty musician gets his part down spotlessly, but the overall take is definitely not happening. Crisis? No, just extra work for the engineer. If you're lucky, you can find a fade from an earlier take that matches tempo and splice it onto the end of the eight-bar fade from the "magic" take. If you're real lucky, the band will play an insert fade to finish off the "magic" take. Two swift cuts and a second later, you've got a complete "magic" take.

If overtime starts to rear its ugly head on the local union clock and/or the producer has lost faith in the musicians and the entire recording process, all eyes will turn to you, anticipating the extra work you're gonna have to do. You must first copy the existing eight bars on the track to another multi-track machine. Copy as many times as you need to get the desired amount of bars for the fade. Well, three cuts and half hour to an hour later you've got one magic take with a 32-bar fade (the last 24 being second generation) - not ex-

"Hardly a day goes by where I won't be slashing away at a client's future million seller."

actly the ideal utilization of studio time! However, your ingenuity has saved the day. And this takes us over to Category 2. "Creative Editing."

Many a long or superfluously arranged tune has found its way into the Top 40 charts because of a clever or inconspicuous "deleting" job. Oddly enough, when your only involvement in a record is editing the single, it's difficult to get any label copy credit. First, because the theoretically unimportant editing would then become too important. Second. because. psychologically, the record buyer and the DJ would like to think that the final "edited" single version of the song is the way it was originally recorded. So you'd better settle for your credit up front and enjoy the edited version as you hear it on your favourite Top 40 radio station.

King Crimson's "Court of the Crimson King" was doing quite well on its own as an album track, vet it found its way to millions of American listeners via the Top 40 edited single version. Cerrone's "Love In C Minor," one of the first disco tunes to take up the whole side of an album, had a lot of success in the discos in the original form. But, with the airplay it received from the edited single, it had even greater success. Ironically enough, along with discocame the concept of editing for length. Since people needed more than five minutes to get into a dancing groove, "discolength" versions of songs soon emerged, either done on the two-track or in the mixing

Mixing and editing are inseparable. Back in my early days, I prided myself on mixing a tune straight through, with all of the cues spot on, I heard wild tales of how some engineers — especially these English chaps — could or would only mix in sections, mixing a piece here and there and then, when each section

was perfect, editing them all together.

I always viewed a mixing console as an instrument, so I felt like a superior musician since I could get the spontaneity that just can't be achieved from section mixing. But even though they weren't getting spontaneity, they were freer to experiment with different "treatments" of various sections, creating radical and (usually) pleasant section depth changes — rather than socking it to 'em purely on the basis of "feel."

I soon found those alorious 'one pass" mixes of mine becoming harder to attain. because I'd eventually end up fighting the No. 1 natural enemy of mankind - Human Error. Usually, quality decreases as quantity increases. And, as my work load increased, after too many hours of racking my brain, trying to get all those cues right while still copping a "feel," slowly conceded to using a blade for a mix. If I got at least half way through a tune and then missed a cue, I'd stop the mix, set up for the mixed cue(s), start the tape and splice them together. Starting with this simple and handy concession to evolving technology, I' soon started editing sections from different mixes to make one optimally mixed tune. These days, hardly a day goes by where I won't be without a razor blade in my hands, slashing away at a client's future million seller.

Of course, with computers around to lend a helping hand with level and cue memory, section mixing becomes both more and less necessary depending on whether you use the computer as a programmed, self-contained section organizer with slight variations, or as a helping hand with each "pass" at a section in an almost total update mode for spontaneous alterations. If the second example is the case, then editing no doubt plays as integral a part in the mixing as would pulling down the old

"master fader" for the grand finale — "It's a fade!!"

In a recording session, multitrack editing can be used creatively with some very rewarding results. By using sections from outakes (of the same track), where some amazing licks or incredible tightness occurred between the musicans and overall sound, you can embellish an already together and happening final take.

During the recording for Michael Narada Walden's first solo album, I Cry, I Smile, the studio was filled with a variety of great musicians, from Carlos Santana and David Sancious on through a list too numerous to get into, not to mention Narada himself. In the control room was Tom Dowd, ex-ace engineer and presentday producer extraordinaire, producing. Dennis McKay, an engineer who'd contributed to many rock and jazz-rock fusion hits of the Seventies, and I shared the engineering duties along with an assistant whose skill and knowledge probably matched our own, without the experience. So there was not shortage of talent or ability in either room.

Most of the tunes had extremely different sections, ranging from classical into jazz, rock and funk and, with the amount of soloing and ad lib comping by the musicians. editing became a necessary routine every three or four takes. Dennis and myself were sharing the editing load, doing two or three in a row, then passing the function on. Even our assistant Randy Mason took a stab at a few. After a few days of this, Tom Dowd (no stranger to editing!) must have wanted to get in on the fun because, in addition to directing this particular edit, he emerged from behind the producer's desk very serious and determined, with blade and grease pencil in hand, proclaiming "This edit's mine!" He then proceeded to meet the challenge by executing that "perfect edit."

Many times a tune is recorded and, after spending a couple of days with the rough track, you find the actual structure needs changing or additions. I've come across this problem many times, and basically you can cut the new sections with the same musicians in the same studio, within a reasonable amount of time, and splice it into the original take - or copy the sections you'd like to lengthen as I discussed earlier. Even though it can be very difficult and is not recommended as regular procedure, you can also use different takes from different musicians recorded weeks apart and sometimes create some clever moods which might have been impossible for either group of musicians to create on their

One particular heartbreaking editing experience happened with a major supergroup — the second cut on the second side of the second album. The guitarist brought me five tapes worth of guitar solos to put together into one 20 second solo! Needless to say, this was a royal pain-in-the-ass and took forever, but I finally came up with a usable solo that got the guitarist's approval. Ironically, there was a clumsy edit in the middle of the solo and even though I pointed it out to him, he insisted I leave it in because it "felt right." Turns out that many aspiring guitarists of the day copied the solo note for note, including this editing aberration, thinking this instrumental passage was nothing but sheer genius.

Jimmy Douglass

Jimmy Douglass spent much of his career as a house producer with Atlantic Records in New York working with such acts as the Stones, Otis Redding, King Curtis, Hall and Oates and Foreigner. He now works as a freelance producer in New York.

Professionals Choice!



RGJones Recording Studios

The Recording Studios Beulah Road Wimbledon London SW19 3SB Tel: 01-540 9881 (5 Lines) Telex: 8814917 (R. Jones)



Ampex Golden Reel Award

Some of you may well have come across the words "Golden Reel Award" in recent months and wondered what it was all about. This is a project which was started in the United States about three years ago, partly as a promotion scheme for Ampex recording products, but also as a means of highlighting the more important aspects of making a hit record.

As Philip Vaughan and Justin Underwood of Ampex Great Britain Ltd. pointed out to me, when a record is released, or when it is successful, it is not often that the recording and production team manage to get any recognition. When the award is made, it goes to not only the artist and producer, but also the engineer and the studio itself, without which, it must be agreed, the recording would never have come about in the first place! Everyone is aware of the amount of time, effort and creativity which a recording engineer puts into his work - all those long hours of concentration and creative ideas - and now for the first time he can find some reward and recognition.

There are a few requirements which must be fulfilled before an award is made and these are, firstly and most obviously, that the whole thing must have been recorded and mastered on Ampex tape of some kind, and secondly it must reach a minimum number of sales. These will be in accordance with the specific country's industry standards for Gold Record Status (in the US the requirement is 500,000 units for albums and 1,000,000 for singles)

Once it is established that a record has met all these requirements the procedure is that Ampex will probably get in touch with the artists. They keep a watchful eye on the studios to which they supply tape and therefore are almost always aware of what is going on. They will then arrange for a presentation to take place at the convenience of both the artists and the studio.

Another commendable aspect of this award is that Ampex donate \$1,000 (about £500) to any non-profit charity organization of the artist's choice and in the artist's name. They have contributed more than \$150,000 to worthy causes since the award began.

The award plaque itself is indeed quite impressive and is certainly a nice way for anyone to remember a recording gig. It features a large, gold covered metal tape reel and an engraved plate with the individual recipient's name, the title of the winning record, the name of the studio and an inscription describing the significance of the awards.

Awards which have been made in the States include the Bee Gees, Blondie, Kiss, Supertramp, Bob Dylan, Roberta Flack, Billy Joel, Donna Summer and many more. The first Golden Reel to be awarded internationally outside the USA was to Abba and their excellent technicians at Polar Studios in Stockholm, Sweden. The LP concerned was Voulez Vous, which was recorded and mastered entirely on Ampex Grand Master, by engineer Michael Tretow. The album reached gold status in both the USA and Scandinavia as well as in most European countries, with over five million copies sold to date and figures still rising.

The first UK award went to the Kinks and their technical team at their Konk Studio in London. It was made in respect of their album Low Budget which was recorded at Konk and in the USA. Released in the USA in July and in the UK in September, the album was the band's first gold album in the USA.

Funnily enough, the next award went to Konk Studios again — this time to Leslie McKeown (remember the Bay City Rollers? Well he's nothing like that anymore!) The album All Washed Up was released in Tokyo and went gold remarkably quickly, which is hardly surprising since he is extremely popular out there. This





Les McKeown

was his first solo album, and the second, which no doubt is destined to enjoy the same success, is on its way.

Anyway, enough of name dropping. This new award is fast gaining success and recognition within the recording world, and I have no

doubt that it will become a very important status symbol and coveted prize in the future. And thank you Ampex for having the awareness to think not only of the artist but of the production team and everybody involved behind the scenes.

Janet Angus





'Reliability and dependable performance'

the philosophy behind the Acoustic range of amplification. And now the very latest in Tube Amplification...the Model 160...

Features: Switchable FET or tube front end, sixty or one hundred watt RMS power output, dual master volume controls, five band graphic EQ, built-in reverb. In addition, an impedance switch allows you to match compatible extension cabinets ohm for ohm at full power without distortion.

60/100 Watts RMS at 5% THD into 4 or 8 Ohms Dimensions: 9 % " H x 22" W x 10" D

But words don't do it justice, it simply sounds like the best you can buy!

GUITAR ENCLOSURES	Model 484	Model 488	Model 468 200	
Power Handling Capacity/Watts (Maximum Amplifier Output)	125	125		
Nominal Impedence/Ohma	0	8	8	
Enclosure Type	Open Back	Sealed System	Sealed System	
Speaker Complement	1-12" Electrovoice EVM 12L Spkr	2—12" Spkrs	4—12" Spkrs	
Overell Size/Inches (HxWxD)	18x22x10%	16x26%x13%	261/x251/x131/	
Shipping Weight/Pounds	45	65	90	



LOOK UP YOUR NEAREST DEALER.

ABERDEEN:

C. Bruce Miller & Co. Ltd., 22 Loch Street. Tel: 0224 55924

BARNSLEY:

BEDFORD: BELFAST: BRADFORD:

Kitchens of Barnsley, 33 Peel Street. Tel: 0226 5867 Mr Music, Bromham Road, Tel: 0234 50861 Mr Music, Bromham Road, Tel: 0232 26818 Kitchens of Bradford, 26 North Parade. Tel: 0274 23577

CARDIFF:

COLCHESTER:

Tet: 02/4/235/7 Sound Centre, 9 St. John's Square. Tel: 0222 34018 Axe Music, 16 Mersea Road. Tel: 0206 65652 Grant Music, 53-53a Home Street. Tel: 031 228 1704

HEMEL HEMPSTEAD:

KENT:

HUDDERSFIELD:

Mr Music, 24 Bridge Street, Tel: 0442 61812

Kitchens of Huddersfield, 5-7 Market Avenue. Tel: 0484 26508 Unisound, 48 High Street, Chatham. Tel: 0634 44068

LIVERPOOL:

LONDON NW6:

LOUGHBOROUGH:

W. MIDLANDS:

NEWCASTLE UPON TYNE: NEWPORT:

Kitchens of Leeds, 26 Queen Victoria Street, Tel: 0532 446341

Tel: 0532 446341
Hessey's, 62 Stanley Street.
Tel: 051 2361 418
Unisound, 213 Kilburn High Road.
Tel: 01 624 3900
Groops Music Centre, 18 The
Rushes. Tel: 0509 30398 or 218020
Modern Music, 30 Castle Hill, Dudley.
Tel: 0384 55293
Kitchpare of Neuropale (1555)

New Bridge St. Tel: 0632 22965 Sound Centre, 107 Commercial Street. Tel: 0633 66814



nobody was ever sorry they bought the best

The Producers

ROY THOMAS BAKER

"I never rated myself as an engineer", said Roy Thomas Baker, and, sitting there in front of him, you'd never have figured he'd had anything to do with such tedious stuff as labouring over a control desk through hours of overdubs, checking levels and pushing levers.

In fact, he looked more like some sort of international playboy, tidily ensconced in his suite at one of the poshest Manhattan hotels. He readily lived up to the plush decor; clad in leather jumpsuit and ascot, his gently-rounded face adorned by large-framed spectacles with tinted lenses.

But, not much of an engineer? Let's face it, Baker forged a distinctive recorded sound that has been an integral part of the vinyl identities of two major bands, Queen and the Cars. Is he kidding? No way:

"I won awards and set trends, but to me engineering was just a stepping stone, an apprenticeship." Speaking of trends, one of the most memorable he helped establish was one of engineers becoming producers, particularly in Britain, where A&R departments usually trained their own people to produce. "They'd have them sit next to the producer and time songs, fill out musicians' union forms - be an assistant producer. At Decca, where I started, one of their downfalls was taking their producers from the company instead of using all the talent they had in the studio, like myself, Bill Price and Gus Dudgeon, to name but a few.

Roy Baker had been determined to be a producer since he was 12 years old. "It wasn't just a musical thing. I was intrigued to find that records had different sounds. In those days you could actually hear where the records were recorded; there was the Tamla-Motown sound, the Phil Spector sound, the New York and LA studios, and Nashville and all those other funny places. Now you have to look on the label to see where they're recorded."

In any case, Baker was into the thick of recording by the time he'd hit his middie teens. "They wouldn't hire anybody over the age of 18, and you'd start as teaboy and work up through the ranks to become a second engineer. My case was different. Not everybody wanted to do classical, most wanted to do pop sessions, but I quite liked classical, so my first session was as a second engineer", which meant that he assisted and learned from the tape operator, who in turn assisted the engineer. By the time the Merseybeat boom rolled around, he'd become an assistant engineer, and eventually he found himself working with bands like Ten Years After and Savoy Brown as a proper engineer.

Unfortunately, that was a cul-de-sac, and Roy soon moved on to the independent studios, briefly stopping at Morgan and then settling at Trident. (This was '60-'70, when he worked on Free's second album and the *Fire and Water* follow-up at those studios.) "Trident was the first eight-track studio in Europe — but it was an American machine, an Ampex, and it had a 60-cycle motor to be powered by our European 50-cycle mains." But ways were found to make it work out well, and Baker's reputation was further enhanced. Meanwhile the desire to be a producer hadn't died.

At Trident, Baker worked alongside other engineers who later became producers like Ken Scott and Robin Cable. Both have had success as producers, but neither can match Baker for his distinctive sound and its commercial impact. Why?

"I disregarded engineering and they haven't. They worked to be both engineers and producers. I didn't. For some people, engineering is the only route to becoming a producer, but when they actually get to be one, all they're doing is selling their engineering talents and crediting themselves as producers. I now have lan Taylor to do the engineering for me." But it was through pooling his interests with Cable that Baker came into contact with Queen.

He'd already produced one album, Nazareth's second. After engineering their first LP and finding the band had no one lined up to do the second, he offered his services to them on the grounds that he'd engineered for them, knew them as people, and "in those days, I came cheap!" The resulting Exercises, however, was too ant a name, for all the potential it displayed. However, with only the one production under his belt, Baker had formed a production company with Cable and others, tagging along when the latter went to look in on a demo session, "It was funny, he was going down to see the band and I was along to see the studio!" But the band was Queen, the song they were taping was "Keep Yourself Alive", and Baker thought they were simply amazing.

"They didn't have a deal at the time, or even a manager. We recorded the first album on downtime at Trident, and the studio wanted to shop the album around. What happened, though, was that they brought in this pseudo-flash American guy to do it, and he came over mainly for another artist that Trident was attempting to make an album with, Eugene Wallace, and so he was actually



shopping the Wallace tape and just happened to have the Queen tape along — 'as long as I'm here, give this a listen too!'."

EMI went for it, of course, and the rest is history. "The first two Queen albums gave us the opportunity to let out every conceivable idea we'd ever had," recalled Baker, and even though the records had their flaws, the realization that Queen was a band to be reckoned with was not long in coming. By the time Sheer Heart Attack was released, even the generally unprogressive US mass market had begun to take the band seriously, and when Baker produced Be Bop Deluxe and gave them that same edgy, nervous sound, people began to talk about it as belonging to Roy Thomas Baker. What was the story behind that unique, highended sound?

"Ah! That's distortion," he chuckled. "A lot of that was me and a lot of that

"Successful means having the top five albums"

was Queen letting me do what I wanted because they liked it. I love treble. I love treble and bass, I hate middle. Americans were all going for that middle sound at the time, and in fact it took that bloody gadget, the Aphex Aural Exciter, before Americans learned to put treble on records. It was the 16 to 20K (kilocycle) end. People say you can't hear above 16K, but it has a harmonic effect on all the other frequencies down.

"But it was not just a case of engineering sounds, it was a sound concept. I was working towards a way of expressing myself and Queen wanted that sound, they wrote and arranged for it too. We used to call it 'crystal' — 'Shall we have more crystal on that?' — but I never really thought about the technical specifics of it at the time."

But even a producer as creative as Roy Thomas Baker must alter his approach, Sheer Heart Attack had not yet broken Queen as a major act when Baker produced Rhinos, Winos and Lunatics for the Welsh band, Man. "I'd mixed their previous album and took a turn at producing them the next time." Man's ever-shifting line-up hardly changed the essential character of the band, which mixed simple, pub rock & roll with dual guitar (and sometimes a keyboard as well) improvisation, almost like a somewhat progressive, slightly tougher version of the Quicksilver Messenger Service. Quite a change from what Baker was used to working with, but "I like to tailor my approach, to be as sympathetic as possible to the artist. I never go into the studio without having several talks with the artists in-

This approach enabled him to meet the challenges of producing such diverse talents as Ian Hunter (*Overnight Angels*) and Dusty Springfield (a lushly orchestrated comeback album). No doubt it stood him in good stead when he went to the States and began working with bands like Journey.

Journey had lots of musical talent, and there was no reason they couldn't write good enough material on which to focus their hard rock attack, "but they had two albums out that were really boring" - not to mention that they were commercial stiffs - "and I put them on the right track." It wasn't easy; the band was evidently attached to doing things their way on their home ground, where they were always well-received. And so Baker soon found himself recording them in a Bay Area studio called His Master's Will, which had rats - it was an oversized warehouse-type affair. Lucikly for Baker, he got his way when

the mixing was moved to Cherokee in LA. How come? "His Master's Will blew up!" He cut the next Journey album at Cherokee from start to finish.

"I like Cherokee, and also the A&R Studios in New York. Every studio has these flat speakers, Eastlakes and Westlakes and flat sounds, and I like studios where the sound isn't built in to and sounding like everywhere else. Cherokee and A&R don't."

The Producers

Baker's instructions certainly helped Journey, who began to rise into the US charts with the Baker-produced LPs. "Even now that I'm no longer working with them, they're still writing more immediate songs and curbing the showy, lengthy solos. My training, you know."

Meanwhile, while in New York overseeing the mastering of the first Journey LP, Baker was asked by Elektra to nip up to Boston for a look at a band called the Cars, "I met them at the hall in the middle of this blizzard. They'd had lots of record company people and producers up there to see them, and all of them had said no. / agreed to produce them on the spot. The songs were basically there, they just needed to be re-arranged slightly - a chorus put in here, a verse taken out there and the speed had to be adjusted - but apart from that, they were excellent." Once again, that nervous, trebly Baker sound emerged; true, it was another variation, but acutely keyed to the Cars' slightly out-of-kilter, on-the-brink sensibility.

A larger adjustment had to be made with Ronnie Wood's *Grimme Some Neck*. "It was sort of a put-together thing. We had a castle and stuck some equipment in it...it was a fun album. It couldn't be approached with an eye to having 'X' number of hit singles on it, since it was basically a biography of a member of the Stones at that time of his life. The Stones just don't take all of it that seriously, so you can't either."

Baker listens to lots of tapes sent him by various labels. "The way I listen to any new tape is I set my little JVC up by the shower in the morning. I'm hung over, I'm tired, I'm feeling grotty — the worst possible conditions to listen to tapes under. But, if it cuts through that, it'll cut through anything." That's how Baker latched onto his latest project, an album with Hilly Michaels for Warner Brothers. "Warners, as do other com-

panies, send me tapes for second opinions, and I listened to the one of Hilly they sent in my usual way. Then Ian Hunter rang me up and said, 'Oh, I've got to tell you something', and I said, 'Tell me later. Now, what's this Hilly Michaels about?' and he said, 'That's what I called to tell you! He was the drummer on my tour, and he's got all these good songs'."

Dan Hartman ("Instant Replay") is involved, with the playing and arranging, but in case anyone gets the wrong idea, Baker characterized the record as having "Abba-like songs, but with more of a rock beat." (Abba are one of Baker's favourites, but he mourns their move towards disco.)

"We've got all my friends on the album, really; Ellen Foley, Greg Hawkes of the Cars, and one number has Hilly singing one part and Liza Minelli and Lorna Luft singing the other." He reckons the album will fill the vacuum left by disco, "basic rock that you can dance to."

In closing, we spoke of generalities. Kilocycles aside, Baker aims for a sound that jumps out of the speakers, and arrangements that never let up, "even when there's a quiet bit, there's always power and tension behind it. Continual movement." It's not always easy, but he wants to get the best out of the artists he works with. Sometimes it means coming down to confrontations, but, as he laughingly noted, "I took a course in child psychology. Seriously, I don't really have that much trouble with musicians. They are often simply too close to their music, but usually they are more than willing to try my suggestions." I wondered why more English musicians didn't seek him out now, and he said that he thought his name was near to mud in Britain these days, as though he'd sold out by having moved to the

Finally, I asked him how successful he thought he was. Admittedly his own harshest critic in some ways, he declined crediting himself with great success: "Successful means having the top five albums." Demanding? "Oh, I suppose success as a producer means that in five years people will be able to look back at one or two of the things I have worked on, like 'Bohemian Rhapsody,' and say that they still stand up. Just like people have said I was a good engineer now that I'm a producer, they'll say I was a good producer of records in the next phase of my career."

The next phase?

"Certainly, I plan to go into video. It's the medium of the future,"

Time for another of my Suicidal Summer Sales? Oh well, let's just hope they all get tempted down to the beach instead."

Clearly there are times when Tim Gentle's customary rock bottom prices can become something of an embarrassment. For example, when everybody has hassled Tim into further cutting his own throat with a Suicidal Summer Sale.

But if you're Tim Gentle you stay philosophical. You can bet something will turn up to save the day. Like a heatwave or two.

Suicidal Summer Supersale Specimen Savings

Classic guitars, 2 only	£1.00	Classic guitars, from	£5.00
Eros Les Paul, copy	£45.00	Eros Acoustics, from	£5.00
HH digital echos new	£125.00	Peavey Backstage, new, one only	£65.00
CMI left-hand jazz bass, new	£85.00	Ibanez PF100 left-hand	£140.00
Laney 100 watt combo	£196.00	Laney 50 watt combo	£150.00
Guild S60D, new	£199.00	Gibson Marauder, wine	£175.00
Up to 40% off Kawai guitars, rrp,	e.g.	R&R semi solid	£197.00
Up to 20% off HH equipment, rrp,	e.g.	VS bass combo	£250.00
Up to 15% off Burman equipment, rrp,	e.g.	Pro 4000 bass head	£285.00
Up to 30% off Carlsbro gear, rrp,	e.g.	Stingray top, 130 watt	£99.00
Up to 50% off Kramer guitars, rrp,	e,g.	350Ğ, new	£185.00
Up to 25% off Ibanez guitars, rrp,	e.g.	MC800 bass	£225.00
Up to 20% off Aria guitars, rrp,	e.g.	Profi Strat T/B sun	£160.00
Dimarzio pickups even cheaper,	ė.g.	PAF	£16.00

MASSES MORE STOCK AT SUICIDAL SAVINGS



Tim Gentle Music's Summer Supersale.

Have a Great Day at the Seaside on the Money you Save!

1420 LONDON ROAD, LEIGH-ON-SEA, ESSEX. Telephone: SOUTHEND (0702) 72926.

On Test

The MXR Flanger/Doubler

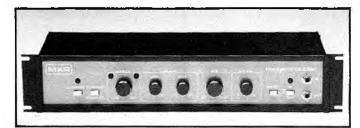
The MXR Flanger/Doubler is not a new unit but this is the first time we have looked at it in any depth. It was one of the first "professional" analogue flangers available at a price within reach of the smaller studio or musician. The mode of operation may be switched between flanging or doubling (really only selecting which of the two available delay ranges is used), hence its title.

In its 19-inch rack format, the flanger/doubler is immediately recognisable as MXR, being in their usual blue finish with white silk screened legends and large clearly labelled controls.

The controls on the front panel, from left to right, start with two white push buttons. The first is the power on/off with its indicator LED and the other is the already mentioned time delay range selector. Pushing it in gives the shorter delay times (flanging) and out for longer delay (doubling). Adjustment over the selected range is made by the control marked Manual giving 0.25mS to 5mS short delay at 17.5mS to 70mS long delay time.

Above the Manual control are two LED's situated to the left and right of the knob. With the sweep controls turned out, the intensity of the LED's gives a visual interpretation of the position of the Manual control in the selected delay range. For a position in the middle of the range, both LED's would be of equal intensity and turning the manual control to the left would cause an increase in the left LED intensity with a corresponding decrease on the right LED. With the sweep controls in use, the LED's give an indication of the width and speed of sweep by alternately increasing and decreasing in intensity.

The Sweep controls are width and speed, the width being the range swept about the delay selected by the manual control until the sweep is 100 per cent of the delay range and then of course the manual con-





trol has no effect. The speed of the sweep oscillator is variable between 0.3Hz and 20Hz which is a usefully wide range.

The mix control alters the ratio between the straight and dry signals in the unit output. This is followed by the Regen control which effects the amount of feedback to the input. This signal is limited dynamically and in bandwidth to increase the regeneration effect without "runaway".

The invert switch inverts the delayed signal before mixing it with the dry signal at the unit's output. Remaining on the front panel is a bypass switch with an LED indicator. When the bypass mode is selected the input is connected directly to the output with no electronics between them. This control may also be remoted from a jack socket output at the rear.

The input and output jack sockets on the front panel are designed to operate at levels suitable for musical instrument use, while the rear in and output jacks are for line level operation with a mixing console. Also on the rear are jack sockets allowing access to and from the internal oscillator. This allows external control of the sweep rate or for the internal oscillator to control another unit.

Internal Construction

Internal access is achieved by removing the end panels, enabling the entire casing to



disassemble leaving the electronics completely open. All the electronics are on one PCB running almost the entire length of the cabinet. The front rotary controls mount directly onto the board while all the cables from switches and sockets are on connectors that plug onto the board.

The PCB is supported only at two points, both on one side, the other side being supported by the connect to the rotary "pots". With all the heavier components being placed near these supports, I don't think there would be any flexing of the board even with rough use. However, continuing my campaign against unsupported lengths of wire, 1 would like to see all wires over about four inches secured or supported in some way. Road use causes vibration and a wire of any length over this figure is capable of vibrating separately from the rest of the unit, causing metal fatigue at its connections and eventually breakage. This is very easy to avoid by securing the wire to the frame at a couple of points.

In Use

This is a surprisingly versatile unit considering that it is really fairly basic in the available controls. It is quiet in operation and I experienced no "nasties" except that noise does increase significantly as the delay time approaches the maximum in the doubling

mode. This is inevitable with analogue devices such as this. Analogue units will have the edge on digital delay units over the short times but after 100mS they become too noisy and have too low a bandwidth to be useable for professional applications. The maximum delay on the MXR is 70mS. It is noisier than the shorter settings but is still quite useable with care (I am really referring to studio use here as it should present no problems at all for live use).

The strong point of this unit is its depth of effect particularly in a flanging mode. It is very nearly as deep as tape methods. The regeneration control has been well designed to make the feedback of musical use rather than just an effect. The width of the internal oscillator range can be used for some very unusual effects which are all easy to achieve with very little fiddling.

The manual provides a variety of "starter" settings — ! particularly like the vibrato setting — and explains the principles of operation, flanging, even giving formulae to calculate the positions of frequency notches in flanging. There is a block schematic but no circuit diagram.

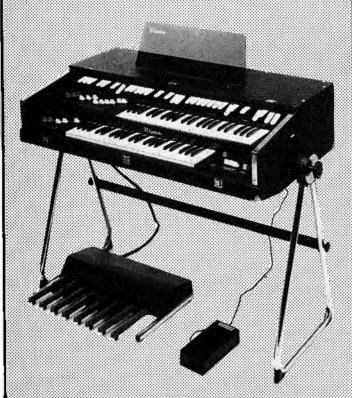
Summary

This is an anlogue device and this should be remembered when considering any criticisms. I have made. MXR make a digital delay line as well so they are aware of the limitations of analogue technology.

Despite being one of the earlier flangers available in a rapidly changing field, this unit is still a very worthwhile one to consider for its simplicity and standard of operation. I found it to be a "user's" device rather than an "experimenters" as its simplicity meant that sounds were there rather than having to be searched for.

Keith Spencer-Allen

COUNT ELECTRONIC ORGANS



£1092.50 inc. V.A.T.

SC110P



£448.50 inc. V.A.T.

String Concert



£1587 inc. V.A.T.

SC448P

SPECIAL THE SPECIAL THE OFFER OF 570 OGO ORGAN



£442.75 inc. V.A.T.

Drummaker 45

For enquiries write or phone:



Wembley Commercial Centre Unit 3.8., East Lane, Wembley, Middx.

Tel No: 908 2323/4

Please send me your free colour brochure on GODWIN organs.
Please send me Bernard Drukker L/P(s) at the special
price of £2.15 each inc. P and P.
I enclose a cheque/postal order for £
NAME
ADDRESS

(IM)

SOUND IS BIG SOUND IS BLUE THE COLOUR IS BLUE THE REPRODUCTION THE REPRODUCTION



TURBOSOUND It's BIG, BLUE and BEAUTIFUL

We're not about to let you into the intimate secrets of Turbosound but we can assure you that it means a real break-through in professional P.A. equipment.

The sound is BIG — Turbosound technology has been developed specifically to combine compactness with all the power you need.

The colour is BLUE because Turbosound stands out from the crowd in every way.

The reproduction is BEAUTIFUL because S.S.E. build quality into Turbosound every step of the way from craftsmen designed and built cabinetry to the outstanding acoustic engineering in all our systems.

Our research team has developed Turbo-



Sigma Sound Enterprises Ltd

Manufacturers and Suppliers of the complete range of P.A. equipment

Atkins Works, Faraday Road, Lenton, Nottingham, England. Tel Nottingham (0602) 783306 sound over a period of 8 years, and during the last 2 years. Turbo systems have been put through the most exhaustive programme of testing during use by major bands all over the world.

We've built our reputation on attention to your needs and we're now proud to offer you a chance to learn more about Turbosound — the world's most compact and efficient P.A. system.

You'll also be pleasantly surprised when we get down to talking about price.

Contact \$ S.E. today, or any appointed Turbosound agent to learn more about this revolutionary new system.

Trade and export enquiries invited.

On Test

Furman Reverb RV-1



Reverberation (or reverb as I'm going to call it from now on) is an essential element in the character of any sound either by its presence or lack of presence. Often in recording it is desirable to add reverb to a signal to enhance its quality or mask an unfavourable recording environment. This has long been realised and almost since the advent of electrical recording there has been much searching for ways of artificially creating reverb. Aside from electro-acoustic techniques involving echo chambers and primitive tape systems, the predominant methods were mechanical.

Mechanical systems could be "separated" into two distinct areas — those using thin metal sheet or foil and those using springs as the reverberant medium. Both systems worked on the principle of exciting the chosen medium by a transducer at one end and picking up the resultant vibrations at the other end

with another transducer. Both systems have been very highly developed from these elementary principles and the top designs in each camp are very important as well as being rather costly. The lower price range has been dominated by spring systems which are cheaper to produce.

All these mechanical reverb systems suffered from common defects particularly in their susceptability to external vibration and the way they would "take off" with percussive inputs.

Various developments have reduced these effects to a marked degree in the high priced units but let's look at what has been happening at the more reasonably priced end of the market where these problems were originally most pronounced.

Furman are a well known name in the US, manufacturing in San Rafael, California. Their range of products includes parametric equalizers and electronic crossovers as well as the reverb unit under reivew here, the RV-1.

The RV-1 is a very compact design using only 1% inches of 19 inch rack space. The front panel is made from ½ inch aluminium finished in black with white legends and dark red knobs. The casing is anodised steel panels which is easily strong enough considering the total weight of the unit is under five pounds.

Access to the electronics is by removal of six screws in the top panel. The front to back depth is only 61/2 inches excluding the knobs, with the bulk of the space being taken up by the spring system. This consists of three 16 inch springs in an Accutronics Type 9 triple-spring assembly. This assembly is floated at each corner from the chassis by a spring support. Each spring has a different initial delay time -33, 37 and 41 mSec respectively with a following decay time of 1.8 s. The initial delay is the time it takes for the spring to become excited and the different delays give a response nearer that of the complex random signal patterns of natural reverberation. Earlier models of the RV-1 only had two springs.

All the electronics are positioned on one PCB with all the components idented on the board. There are a couple of long wires that could benefit from being better secured to stop them flopping around but the general internal appearance is neat and tidy.

Controls

Staring from the left, the controls begin with the Input Level. This is not the overall input level but the input to the reverb section and so the input level to the spring transducer via a limiter. When the threshold of the limiter is reached and gain reduction begins the Limit Threshold green LED flashes. This is situated next to the Input Volume.

Next comes the equalisation section which schematically is situated on the signal return from the spring and so effects only the reverb signal. The Mid range is a parametric design with continuous adjustable frequency selection from 160Hz to 1400Hz coupled with the equalisation control offering + 18dB. The treble equalization control is a fixed turnover shelving design offering + 18dB on a curve beginning at 2.5Hz with maximum effect at 10kHz.

The remaining two knobs mix the output of the unit, balancing between the reverb and direct signals. To the right of the reverb a red LED illuminates when power is applied to the unit. There is no mains power switch.

The rear panel contains only three unbalanced jack sockets - line in, line out and a remote switching of the reverb in/out. The RV-1 is designed to operate at levels that require it to be used between a pre-amp and the power amplifier (musical instrument amplification) or on the echo send of a mixing console. Despite this, a guitar or similar input will drive it enough for some uses but the noise level is rather too high for any discerning applications. Of course, used in this way the limiter would not be operative as the input level would not reach the threshold level of the limiter.

There is provision on the electronics and in the manual to convert the unbalanced output to a balanced one if this is required. With the power removed there is no output even from the direct signal.

USE

With spring reverb units positioning is fairly important, i have already mentioned their susceptibility to external vibration and this obviously effects where they can be used. I found the RV-1 to be relatively immune to knocks and even a hard rap on the top of the cabinet, as long as it was firmly

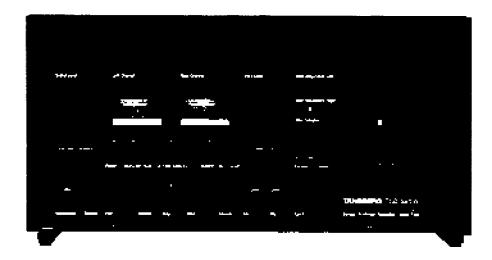
secured in a cabinet (the vibrational energy being absorbed by the spring assembly suspension). Vibration through the air and cabinets etc. is of course a problem, particularly at bass frequencies. High level monitoring in studio control rooms normally prevents mechanical reverb devices from being positioned actually in the control room (excepting

a couple of high priced models), The RV-1 is no exception to this rule although use of its equalisation section to find and cut any possible unwanted resonances will enable the RV-1 to be of more use in a noisy environment than most such units. The EQ can also be very effectively used to tailor the sound of the reverb, particularly in the mid range. For

example, a large cut at about 300Hz gives a rather "dry" reverb — more akin to the sound of a small live room. Other frequencies will give different effects.

When the RV-1 is used for mixing, the EQ can be used to filter out unnecessary reverb frequencies. For example, when a full frequency band is present in the mix, it is possible

WHILE YOU'RE MAKING MUSIC WE'RE MAKING HISTORY.



The search is over. At last a cassette deck with performance virtually indistinguishable from 15 ips reel to reel recording. The Tandberg TCD 440A with both 'Dyneq' and 'Actilinear'

features. Available from your dealer now. Another Tandberg Ltd, 81 Kirkstall Rd., Leeds LS3 IHR. landmark in Hi-fi history.

TA	N	D	B	E	R	G
TUNEL				n's A	LRE.	ĂĐY.

For tull specification and your local dealer's Tandberg Ltd., 81 Kirkstall Rd., Leeds LS3 IHR	name write to Tel:35111.
Name	
	<u>IM</u>

to filter out certain reverb frequencies that are masked by other signals and not heard. This will actually clear the sound, making it more distinct and reduce the level on the meters without lowering the perceived volume of the mix. This equalization would normally be applied at the send and return bus but a lot of the mixing consoles that this unit is likely to be used with probably would not have any spare facility for this.

I didn't find the treble equalization to be very effective on the material I used for testing. I feel that maybe a variable high pass filter on the input to the spring would be of more use to me, but it is surely a matter of choice.



The quality of the reverb sound is really good. The actual decay is very smooth and clean. I think that this is probably the best sounding spring line reverb I have heard at a reasonable price.

With the input crossing the limiter threshold periodically it is also surprisingly quiet. The only time I was a little disappointed with the response of the RV-1 was with the bass str-



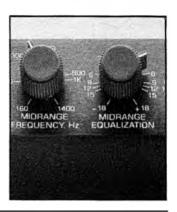
ings of a standard electric guitar causing ringing in the spring although it only did this when the input level was high enough to flash the threshold LED. Lowering the level sent to the RV-1 removed this trouble.

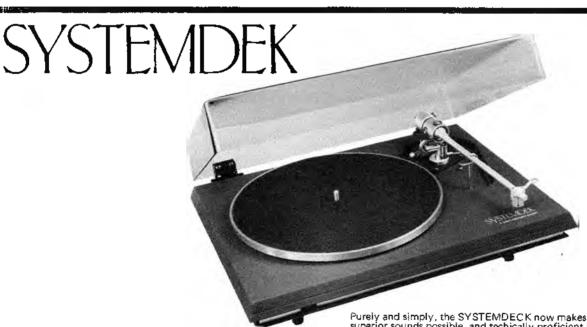
Summary

The RV-1 is a really excellent little unit, well designed and effective in use. It does not equal

the performance of top line spring and plate reverbs costing over twenty times the amount, but it comes a lot closer than its price would in-

Keith Spencer-Allen





SYSTEMDECK is designed to be the idealists signal source and those familiar with the requirements to make a good turntable will realise that just about everything has been included to make it an exceptional product.

An unobstructed flow of information from the disc has been sought by creating the optimum stylus to disc interface or groove CONTACTISOLATION'

To pursue this objective practice ah has been aligned closely to theory in the application of specialist engineering methods, at a counter measure against vibrations and resonance in the audio band

Purely and simply, the SYSTEMDECK now makes superior sounds possible, and techically proficient listeners will instantly spot for themselves the abundant clues to its outstanding depth and clarity

Superb eye pleasing styling and a lat unious suede finish complete the picture for the perfectionist

Feature for Feature, Dunlop System's SYSTEMDECK stands without peer among transcription turntables, offering more in sound value, adaptability, styling and sheer value for money than any turntable available

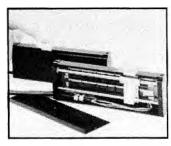
The SYSTEMDECK demands the full attention of every system builder and serious music listener

DUNLOP SYSTEM

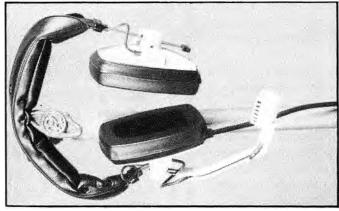
Transcription Limited P.O. Box 9 Troon, Ayrshire Great Britain Telephone (0563) 29777

Studio News

Cetronic Ltd. have announced a new range of rectilinear conductive plastic faders by MCB, known as the AT 104 and AT 2104. Both feature a travel of 104mm with the 2104 being a two channel version of the 104. The end of travel cut off is at -85dB with a claimed working life of over one million operations. A design feature is the spindle slot dust trap to protect the travel from the usual studio nasties of spilt drink and ash. Cetronic Ltd., Hoddesdon Road, Standstead Abbots, Ware, Herts. SG12 8EJ.



Shure Electronics have announced a stereo microphone adapter known as the A27M. It will enable two microphones to be mounted on a single microphone stand. One advantage is the wide variety of stereo techniques that may be used with the A27M including X-Y, ORTF and other configurations. The vertical separation of the microphones may be adjusted between 31.8mm, 66.7mm and 102mm. Its dimensions are 168mm long and 25.4mm in diameter with a weight of 392 grams. It will have a list price of £12.60 + VAT.



Beyer Dynamic have added a large number of new products to their already extensive range. Additions to the range of microphones are the MCE 5 (a sub-minature electret condenser). M420N and M422N (hyper-cardiod dynamic special application mikes e.g. for voice in noisy surroundings such as control rooms for talkback) and the M130 (reintroduced double ribbon figure of eight dynamic). Also new are the long and short shotgun tubes for the Beyer Studio Microphone System which now completes this comprehensive range of condenser mikes and accessories.

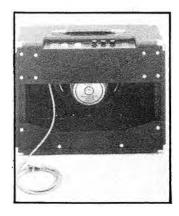
Adding to the headphone range are three models for special applications — the DT 102 (one earpiece on to enable the wearer to hear acoustic cues as well as the headphones), the DT 108 (as the DT 102, but with a fitted microphone) and the DT 109 (a complete headset but with the same fitted microphone as the DT 108).

Brooke Siren Systems manufacture a number of audio components including the Contest AR 105 lead tester for XLR type and ¼inch jack connectors, the MCS 200 electronic crossover system that is fully modular and can be expanded to a maximum of a 5 way stereo system and the AR 116 active DI box.

Brooke Siren say that in the last three months they have sold over 250 for studio and live sound applciations. As well as the normal jack socket inputs and XLR type output socket it features a phase reverse switch, earth lift, switchable low pass filter, switchable attenuator of 0, 20, 40dB to enable it to work from many differing inputs as well as a main/standby battery system or a phantom power unit to replace the main battery. Price of the basic AR 116 is £59 excl VAT.

Brooke Siren Systems, 92 Colney Hatch Lane, Muswell Hill, London N10. New combo guitar amplifiers are introduced everday but one that is a little different has been announced by Axess Electronics Ltd., known as the Session 15:30. It has been designed for studio or demanding low power stage applications and it is an all valve design with the application of modern components and construction techniques.

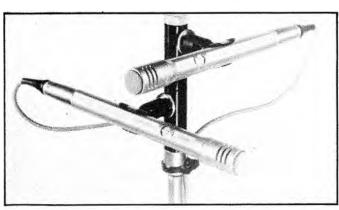
It has a choice of outputs of 15 or 30 watts and a choice of sensitivity as well as three band tone network and DI and monitored outputs which are designed so that they contain

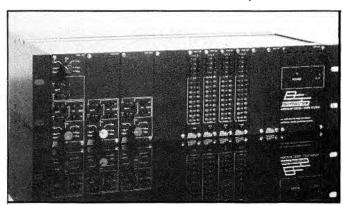


any distortion which is generated in the output stages. The speaker is a 65Watt Celestion and this is all mounted in a compact strong cabinet of 22½ inches wide by 16½ inches high and 12 inches deep.

Axcess Electronics Ltd., Viables Lane, Basingstoke, Hampshire RG22 48U.

Keith Spencer-Allen





Sound Lasers

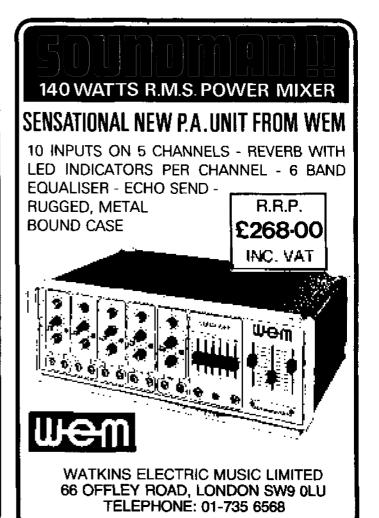
Sound Lasers are a breakthrough in acoustic transducer technology, as far advanced over conventional loudspeaker systems as lasers are over lightbulbs. The secret is the resonant air column at the heart of each Sound Lasers design. It controls every aspect of the sound, as no horn or cone ever could.

Sound Lasers produce sound that's super-clean and ultra-natural. They project the full sound throughout the whole room — every seat is a great seat. But they're smaller lighter and simpler than ordinary speaker systems. That's why they're being designed into PAs from clubs to coliseums, used in amplification for instruments ranging from guitars, to synthesizers, specified for recording studio monitors and every other professional application.

Are Sound Lasers designed through mathematical analysis, or laboratory tests, or computer simulations? All of these, of course, but none of them has the last word on a new Sound Lasers design. We make the final decision by listening . . . and so should you!

Transylvania Power Company

260 Marshall Drive, Walnut Creek, California 94598 USA



PUBLIC ADDRESS CO.

(LEICESTER)
31 NEW PARK ROAD
LEICESTER

PAAND LIGHTING HIREAND SALES

500/2500 watt PA

6kW lighting rig control Any distance catered for Sales and Service Large stock of PA & lighting equipment Main local R.C.F. Agent

(0533) 83 3471/2



MUSIC SHOP BANBURY

MAIN AGENTS

for

Aria Guitars

Come and try any one of these amazing guitars from the large range we have in stock.

Prices to suit your pocket.
Finance Available.

Part Exchange Welcome.

10/11 Parsons Street, Banbury Telephone: 2553

relephone

All second hand equipment for 3 Months

HIH MA-100

HIH WS MUSICIAN COMBO

HIH ZXIS

TELOI558 2666

ALL new equipment fully guaranteed " for one year"

(0, 0, 1, 2,		
C = 1 = 2 = 1 fr	43028 307	GuiTARS Gibson 4/Paul Gibson 7/Paul De Gibson 4/Paul De Epiphone Crestivo Rickenbacker 4 Fender Precissi Fender Stratt Ibanez Artist Westock many ideal for bea
Aria LC.440 YAMAHA FG331 FOLK YAMAHA FG335 JUMBO YAMAHA FG335 JUMBO YAMAHA FG-340 JUMB	21930 183 89-72 97-79 115-93 24495 212 514-05 445 160-43 139 465-29432	Fender stat/the Fender Precision Special effer Not repeatable Regers London New with sta
marshall sow miv top Amplification — s/hc	227.76 197 p33638 291 p0165 115 117 75 237 199 2100	fully Guckar Property of your are in china way way of the control
marshall Artiste 2x 12 f marshall 4x 12 cab go marshall 8x 10 Vgood Marshall Howerell bass Marshall 30W Combo Fender Tremolux-old V Amp a cab Fender 2x 12 bandmas Fender twin reverb	bin 146 .900d. 130 .900d7	Two 1 x 15 Bass Bins Two 2 x 12 D.C. + Tweeter Mid Cabs. Two Radial Horns. £568 Fer Pair 2x 1 x/5 Bass bin £99 each 2x 2x12 mid Cab £84 each

S/hand our U Black Beauty 69 £590 bird Bass Perfect eluxe 59 18-1850 e 475 388 280 bod 6000 BASS Black 245 ion min wht 225 Black RIN 189 playable copies juners from 35

tele cases new £38 bion Jazz cases 144

-1 only le! tends £950 £598

A SYSTEMS;

nteed, we will re money, in full, days of purchase

Fender twin reveno 264 cab Ester HIH Concert 1215 PABIN. PAIR. 180 2×1 Radio

horn \$85 each prices inc voct!

Holiday Music

GOOD



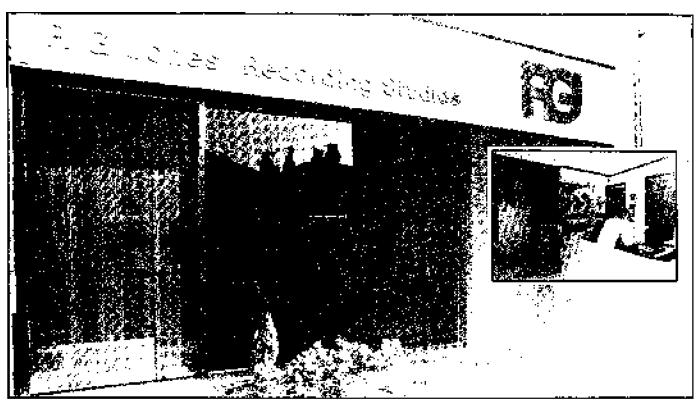
579 HIGH ROAD, LEYTONSTONE, LONDON E11 4PB. TELEPHONE 01-558 2666

139

175

Studio of the Month

R.G. Jones Wimbledon



When hearing the uttle R.G. Jones all sorts of corny allusions spring to mind such as "keeping up with the Joneses". Well if you are going to take that approach you will have your work cut out. This company was founded in would you believe 1926 when recording was at its most primitive. It was founded by R.G. Jones senior whose son Robin is now owner and managing director.

In the 1930s Jones Senior started to introduce sound into the theatre. He also did a lot of work in military and emergency PA. The theatre work started out with just sound effects and gradually they introduced the idea of using recording facilities. At this time the studio was a two-track facility situated in Morden, South London and they were working with artists such as Joe Loss and early dance bands and trios.

In the early Sixties the studio went four track — their first release being Alvin Roy's Jazz Band. In those days they worked with all sorts of now very famous bands including the Rolling Stones, the Yardbirds, the Bee Gees, Elton John, David Bowie, Iggy Pop, Robin Gibb, Jimmy Page with Jeff Beck and the Who.

The next step was obviously to go eight track, and at this stage their work included an album for the Average White Band called *Show Your Hand*. 1974 saw the graduation to 16 track facilities. At this stage they were working on both demos and masters including some work for Alvin Stardust (My Coocachoo)...

Finally in 1975, within 18 months of going 16 track they took the final step to their present status of 24 track. In 1977 the whole studio was completely gutted and redesigned making it very luxurious and in keeping with the quality equipment and recording available.

That's the history, now the facts. The studio area has a capacity for just over 30 musicians, i.e. it is quite large. Acoustics were designed by Sandy Brown Associated and incorporate a very wide range,

catering for everything from classical music right through to rock. At the rear is the live area where the carpet may be taken up revealing a parquet floor which is very nice for acoustic work such as string sections.

The screens are a special feature, being custom built. The average studio screen being quite thin and not that tall, this studio has gone one step further in every aspect and these screens are very tall and very solid with the usual absorbent and reflective sides. Because of their size, when they are put together in a line they form a good solid wall and therefore give excellent isolation and can be used to create very nice booths. They are especially effective for a good drum sound.

There are three isolation booths. Two of these are permanent fixtures built in and the third can be dismantled. It is therefore not quite as sound-proof as the others but nevertheless a very comfortable acoustic to work in. The drum booth is built on a floating floor, and the window may be

removed for the drummer who is not happy being cut off completely from the rest of the band. It has traps built into the ceiling and there are low frequency absorbers built into the lower half of the walls, thus the bass sound is very nice indeed. The third booth is used for vocals and acoustic work e.g. guitar, flute etc.

The ceiling above the live area also has a very large bass trap built in with the intention, once again, of enhancing such things as the string sound.

Atmospheric features include a large number of different coloured spotlights all over the studio so that different effects can be created, even so far as isolating one section of the room for those intimate affairs, if you know what I mean,

This room houses the resident Steinway grand piano (B model) which is tuned at least every other day at 5am — very nice. Apart from this there are no other "house" instruments available and this is quite rightly justified by their attitude that when you are working with

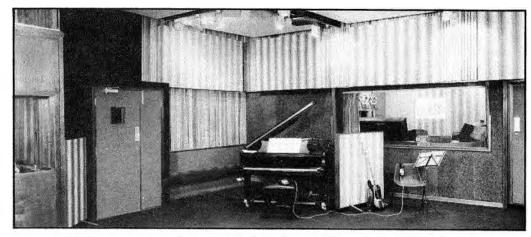
professional musicians of a high standard you are much more likely to meet their requirements of quality and choice by using reliable instrument hire people. Among those they use regularly are Julian's, Keyboard Hire and Percussion Services.

The studio has dealings with all the major record companies on a regular basis — CBS, Pye, RCA, EMI and Polydor to name but a few. Their recent work includes the following very well known artists — Barbara Dickson, Leo Sayer, Johnny Logan, Elkie Brooks and Cliff Richard whose "We Don't Talk Anymore" was done here.

I'm not sure why, but they consider themselves to be "at the bottom end of the top end of the market". That is to say, they don't work on any demos now — dealing with professional musicians all the time — but because they are situated out of central London their rates can be lower. So the only way I think they can be described as being bottom of the scale is if It is one of expense!

In the control room there is a Neve Custom 32/16/24 quadrophonic desk, featuring VU and PPM metering (to accommodate their film and TV work). It uses EMT and AKG echo. Effects include Autopans, Time Modulator, Space Station, Harmoniser, Phasing, Aphex Aural Exciter, Neve or Audio Design Limiter/Compressors, Kepex Noise Gates, Cooper Time Cube and Neve Stereo Width units. The monitors are JBL 4350s powered by Ameron amps and domestic monitoring is on the little ADS speakers.

The desk also has built in speakers which will illustrate what it will sound like on a transistor, although in this day and age of high technology domestic sound equipment I'm not sure that these are very relevant. Tape machines are 3M M79 16 and 24 tracks, two Studer A80s for mastering, two B62s, and they also have





three varispeed Revoxes. Noise reduction is Dolby A. The cassette deck is a Technics M85 which represents the importance Robin places on providing clients with high quality cassettes for home listening or playing to the record companies. Good point.

In the control room there is also one of the most important features — the staff, which consists of Chief Engineer Gerry Kitchingham, Engineer Martin Jones, and Tape Op. Rachael — athough she has now reached the stage where she has started doing some

engineering of her own, Gerry has been with the company since he left school 13 years ago and has been engineering with them since the days when they were two track mono. Quite a track record. Ahem.

Entertainments include a beer garden and a pool table. When asked what they thought was the main attraction, they said that people appear to consider the studio to have a good atmosphere for working in. Local facilities are also very good with nice pubs and excellent restaurants of every type and price within easy distance of the studio.

One thing that Robin does want to put across is that they do work with artists in every field. Anybody with any type of music can be excellently catered for and are always made very welcome.

Rates are competitive at £36 (excl. VAT) per hour basic for 24-track and £32 (excl. VAT) for 16-track. The company also has its hand in other areas of the sound business, namely its own PA Hire, dealing with road equipment, TV work, trade shows and conferences. But that's another story.

Janet Angus

RSD. Sudiomas en British Dealer Network







STUDIOMASTER 400c AMP

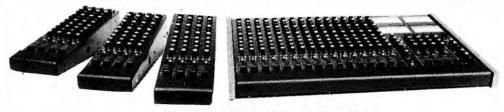




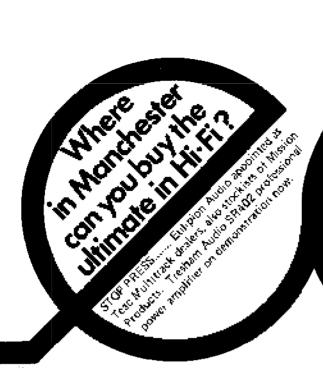


STUDIOMASTER 16/4

	SIDE STREET MUSIC	EDINBURGH	031 337 1071
	McCORMACKS	GLASGOW	041 332 6644
	KIDD BROS SOUND	BELFAST	647566
	HESSYS	LIVERPOOL	051 236 1418
	TRACTOR MUSIC	ROCHDALE	56287
*****	WIGWAM ACOUSTICS	HEYWOOD	68766
	A 1 SERVICES	MANCHESTER	061 236 0340
	S.A.I.	COPPULL	791 645
	HIGHWAY MUSIC	MANCHESTER	061 833 0328
	CARLSBRO SOUND	\$HEFFIELD	663862
· · · · · · · · · · · · · · · · · · ·	MUSIC GROUND	DONCASTER	843037
	CARLSBRO SOUND	MANSFIELD	26199
	CARLSBRO SOUND	NOTTINGHAM	704820
	MUSIC STOP	WOLVERHAMPTON	29352
	WOODROFFES	BIRMINGHAM	021 236 4992
	SOUND PAD	LEICESTER	20760
	BUZZ MUSIC	HEREFORD	52016
	BIGGLES MUSIC	BRISTOL	552 147
	CAMBRIDGE ROCK	CAMBRIDGE	65093
	DON LARKING	LUTON	27195
	E.S.S.	BARNET	01 440 3449
	TURNKEY	BARNET	01 440
	A.E.W.	LONDON WC2	01 836 2372
	CHROME AUDIO	LONDON	01 995 4712
	MACARIS	LONDON WC2	01 836 9149
	KENNARDS	CANTERBURY	60331 9221
	SOUNDWAVE	ROMFORD	25919
	KENNARDS	ASHFORD	23226
	HOLIDAY MUSIC	LONDON	01 558 2666



STUDIOMASTER 16/4+ MODULES



Eulipion Audio-the small company that specialises in

Revox, Linn Sondek, A & R, Grace Nakamichi, Quad, Meridian, JBL, Swallow, Sansui, Dual, Ram, Hadcock, Dhalquist, \$TD, Thorens, Michell, Gale, Asak, Supex, SKS

To ensure we can give you our undivided attention at all times please make an appointment before calling.

eulipion audio

Eulipion Audio, Hi-Fi Equipment Specialists, 81 Wilmstow Road, Rusholme, Manchester M14 5SU Telephone: 061 225 4448 ACCESS, BARCLAYCARD, H.P. TERMS AVAILABLE

Let's face it, good hi-fi equipment is expensive. That's why we personally select the best equipment available and only when it has passed our exacting tests do we offer it to you. We believe you should take your time before purchasing, so we give you expert, unbiased advice, the time to choose (not by listening to any smooth talking salesmen who's more interested in commission than complete customer satisfaction but by listening to your favourite music in pleasant, relaxed surroundings) and an after sales service that's pretty unique in the hi-fi world, let alone Manchester.

Where in East Anglia can you go to try:

HH, Fender, Gibson, Vox, Laney, Rickenbacker, Guild, Music Man, Aria, Marshall?

12 months Interest Free Credit on Gibson

Guitars & Basses

e.g., Les Paul Custom (inc. case) Deposit £56 + 12 months @ £42.50 R.R.P. £566 Gibson Marauder (inc. case) Deposit £29 + 12 months @ £22.50. Special Price £299 For FREE Gibson Catalogue and Interest Free Terms for any Gibson Guitar or Bass Phone or Write



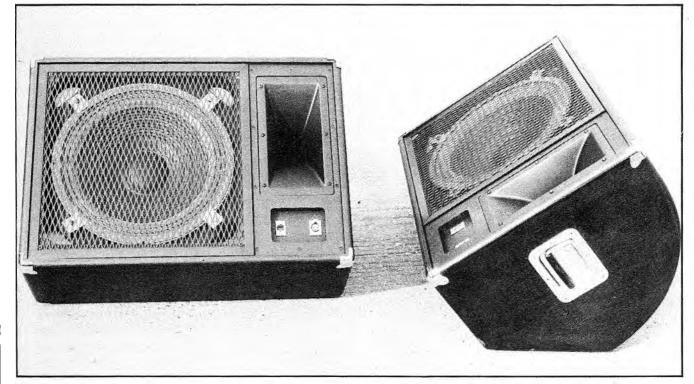






6-8 Risbygate Street, Bury St. Edmunds, Suffolk Telephone (0284) 703366

When you get round to monitoring why not give this a try



Specification features:

- * Curved back to eliminate standing waves, therefore enhancing bass response
- * Evenly spaced ports around speaker to improve acoustic loading
- * Metal grill cushioned in rubber
- * Metal corners and handles
- * Hardwood skids
- * Special filter for tailored response curve
- * Choice of Gauss, Electrovoice and RCF bass speakers
- * Emilar E.C.175 compression driver mounted on our own monitor horn

Price with Gauss 15" bass speaker £345 + VAT Telephone Tony Rossell for information (0268) 773491;



MEMPHIS MUSIC, 41 ESSEX ROAD, ISLINGTON

THE STACK CASE

Since the early 1970's the world's top bands have come to rely on custom built flight cases to protect delicate, valuable, heavy or awkward items in the growing range of instruments and stage equipment which are now essential to the success of their performances.

A flight case makes the manhandling and transportation of anything from a few microphones to giant rotary mirrors a safer and more efficient operation.

Money invested now in good flight cases can be easily justified in terms of greater reliability, longer life and

higher resale value when compared with the ever increasing cost of repairing or replacing accident damaged equipment.

THE STACK STRENGTH

Many years of meeting the special requirements of the worlds hardest working touring bands means that all the materials, components (many of them specially designed and manufactured), and production methods, have been tested and developed under the most destructive conditions.

We can say with absolute certainty that Stack flight cases are made by Europe's most experienced and efficient specialist manufacturer to guarantee you the most strength and

quality for your money. Every case is hand built to stand up to a long, hard working life and last.

THE STACK SERVICE

We recognise that while the need for quality flight cases is greater than ever they have been much harder to obtain than the instruments which they protect.

To eliminate this problem we have established with the co-operation of a number of the country's finest music stores a network of Stack Custom Case Centres to act as local sales and distribution points. They are equipped and ready to give "over the counter" quotations on cases custom built to meet your requirements and we have geared our end of the operation to offer you the fastest custom flight case service in the music business.

Within seven working days of receiving your order, your case will be ready for collection at the Stack

Custom Case Centre from which you ordered it.

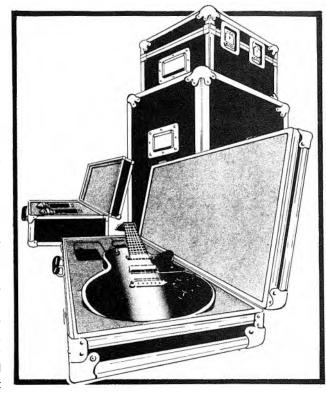
For a small additional charge, we can even stencil your name or your band's name onto it for you.

SPECIFICATION

All Stack flight cases are made from the finest plywoods laminated with top grade fibre board in either green or brown (please specify).

Heavy duty metal corners are used throughout the range and special aluminium extrusions combined with strategically riveted construction give absolute rigidity and strength.

A comprehensive range of fittings and accessories is available to suit your requirements.



ORDERING

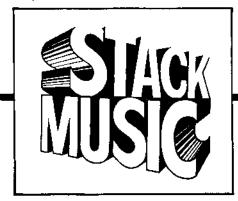
Simply visit your local Stack Custom Centre for an exact quotation and place your order specifying:—

- 1) The make and model of the instrument to be cased or its overall dimensions.
- 2) The case colour required (either green or brown).
- 3) Exact written instructions of stencil wording.
- 4) Precise information on any special requirements.

NOW YOU CAN JOIN THE WORLD'S GREATEST BANDS - AND HIT THE ROAD WITHOUT HURTING YOUR GEAR!

LOUDWATER MILL, STATION ROAD, LOUDWATER, HIGH WYCOMBE; BUCKS.

Telephone: (0494) 23673 Telex: 837882

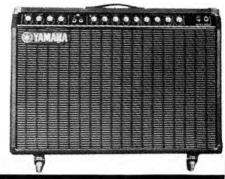


Second to none...



6 10 May 1 M





G100—112
With 1 x 12" speakers this G series amp incorporates features to produce clear, dynami tich and powerful regunde.

Bass 1156 100W RMS Combo with 1 x 15" speaker housed in a rear loaded reflex horn enclosure. Developing greater bass response with plenty of punch.

E 1005
Analog delay machine for echo up to 400 mill seconds with modulation section incorporating chorus flanging and vibrato effects.

G100—21211
As the G100—112 but with 2 x 12" speakers. Like all G s amps it has charned auto change, pull bright and pull la switches, natural distortion, reverb and parametric E.Q.



SF 1000 Complete with Yamaha humbucking pickups and push button switch for single cosound. This 24 feet guitar is available in blonde and oil stained.

SA2000 Humbucking pickups semi acoustic made of beech and birch with ebony linger board. Available in brown sunburst and burgandy ret

SG2000
One piece body and neck constructed of meple and mahogany. Complete with solid brass sustain plate and abony finger board Available in brann sunburst, cherry sunburst, cherry, brown and black.

BB1200
One piece beautifully laminated in roct maple and mahogany. Full 21 trets. Available in brown stain or natural.

SC1200
One piece body and neck, three single go bar magnet pick ups and phase reversing switches. Available in brown stain or natural.



YD5222 Five drums, stands and pedals, mahogany shells. Available in black, white, silky red, silky brown and silky blue. Heavy duty hardware as the 7000 series. Only available in 22".



YD7000 Series
Five drums, stands and pedals, in Agathis and Philipping
Mahogany laminate. Available in real wood and black.
Available in 22" or 24". Heavy duty hardware.



YD9000 Series
Five drums stands and pedals, birch wood shells. Available in chron or natural wood. Extra heavy duty hardware. Available in 22° or 24° size.



S5
Compact monophonic synth with the controls you would expect on a compact monophonic synth with the controls you would expect on a control of the controls of the control of the control



CP 30
Velocity sensitive 6½ octave electric piano. Stereo output each with 3 piano sounds and one harpsichard. Each note is derived from two oscillators which can be detuned to give rich colouration of sound. Includes fremelo decay, tone volume and balance controls.



CS 20M

⁸ This dual V.C.O. mono synth features eight digital programmes to instant storing of sound. This synth has cassette interface capabilities providing virtually unlimited memory.



You can earn £20,000 per year with

COURT ACOUSTIES LTD

We are the UK Agents for





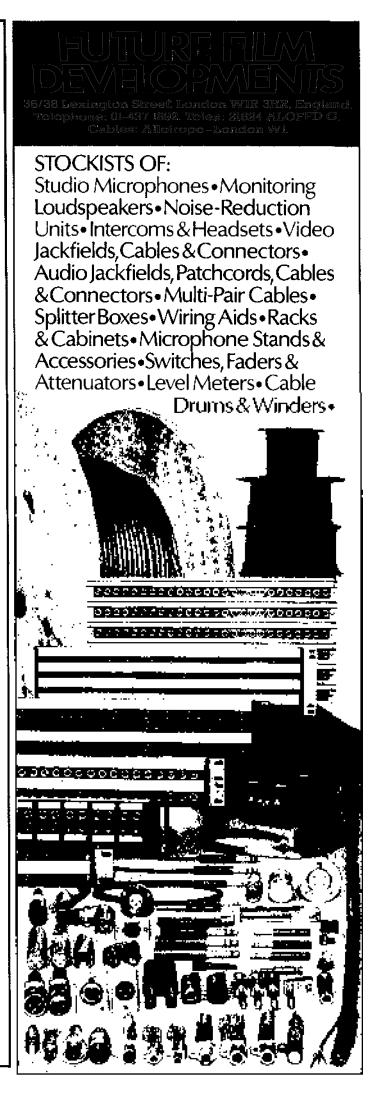
London Agents

TANOY.

and we design and manufacture the World's Finest Sound System

We are looking for the best salesmen. Reward accordingly, please send CV to:

Stephen Court,
Managing Director
35-39 Britannia Row,
London N1 8QH
Telephone: (01) 359 0956
Telex: 268279 BRITRO G



THE KEY THREE

The Jupiter-4, the RS-505 and the MP-600; three outstanding keyboards from Roland.

The Jupiter-4 is a four voice polyphonic synthesizer with built-in computer memory. Eight different sounds can be "patched up" before a performance and held ready for instant re-call. In addition the Jupiter-4 offers an unlimited variety of programmable sounds .10 pre-set sounds and special features such as an "Auto-Appeggio" make you feel like you've got three hands. The Jupiter-4 interfaces happily with most modern synth equipment and full line in/out and remote control facilities are included.

The RS-505 is a paraphonic string machine offering unbelievably realistic string sounds with the range of a symphony orchestra. The three sections of the RS-505-strings, synth and bass, can be played either seperately or together. Three modes of pitch shift are available; manual, automatic and pedal and a pitch slider is located on the front panel for convenience. A 49 key six octave keyboard allows full technique to be employed.

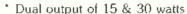
The MP 600 has proved to be the ideal piano for live performances. The 64-note keyboard has a weight-balanced action and a built-in graphic equaliser allows the player complete control over sound shaping. A damper pedal provides realistic control over sustain. See the Key Three at your Roland dealer now.





SESSION 15:30

The first professional valve combo developed for studio use.



* Low Noise - Low Hum Radiation

* Built-in D.I. Box and 'Gain Booster'

* Provision for foot volume pedal

* Slave linking jack

* Input D.C. 'blocked' to prevent possibility of electrical shock

 Circuit unconditionally stable at high gain/high frequency amp settings

* 3 band tone network

* Heavy gauge steel chassis

* Rugged 19mm ply cabinet: panels secured with

Trades Lane.

heavy 2BA machine screws and tee nuts "Celestion H.D. 65 watt. 12" driver

* Waterproof cover and mains lead supplied with 13A 'Duraplug'

* Dimensions: Width 22½" x

Ht. 16½" x Depth 12" * Weight 46½ lbs.

PRICE: Direct to musicians.

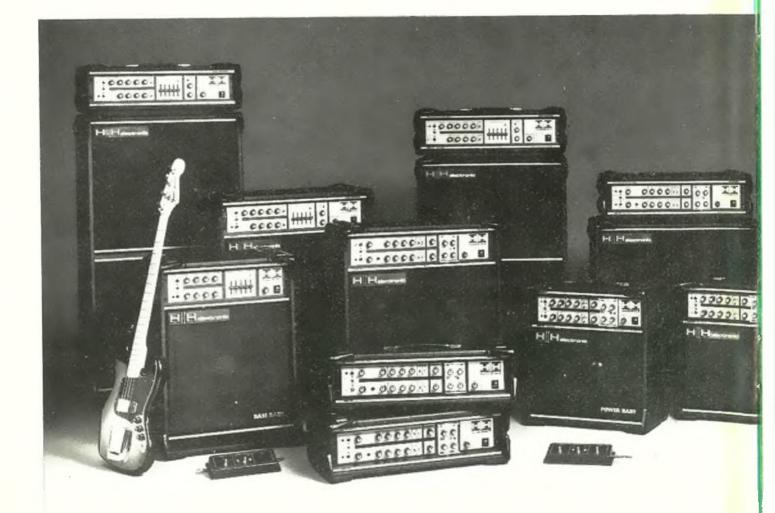
£195 incl. VAT

* GUARANTEE: 2 years (see conditions)

Introductory offer: FREE DELIVERY IN UK, not applicable to N. Ireland

* Money back guarantee; phone Stewart Ward on

(0256) 58415 for details



Bright Ideas







With a style to meet any guitar player's requirements.

Sigma guitars have progressed into a complete line of fretted instruments. A representative example of Sigma quality and popularity is the DM-5 shown here.

Constructed with mahogany back and sides, natural finish spruce top, and adjustable neck, the DM-5 has become one of the most demanded models in the Sigma line.

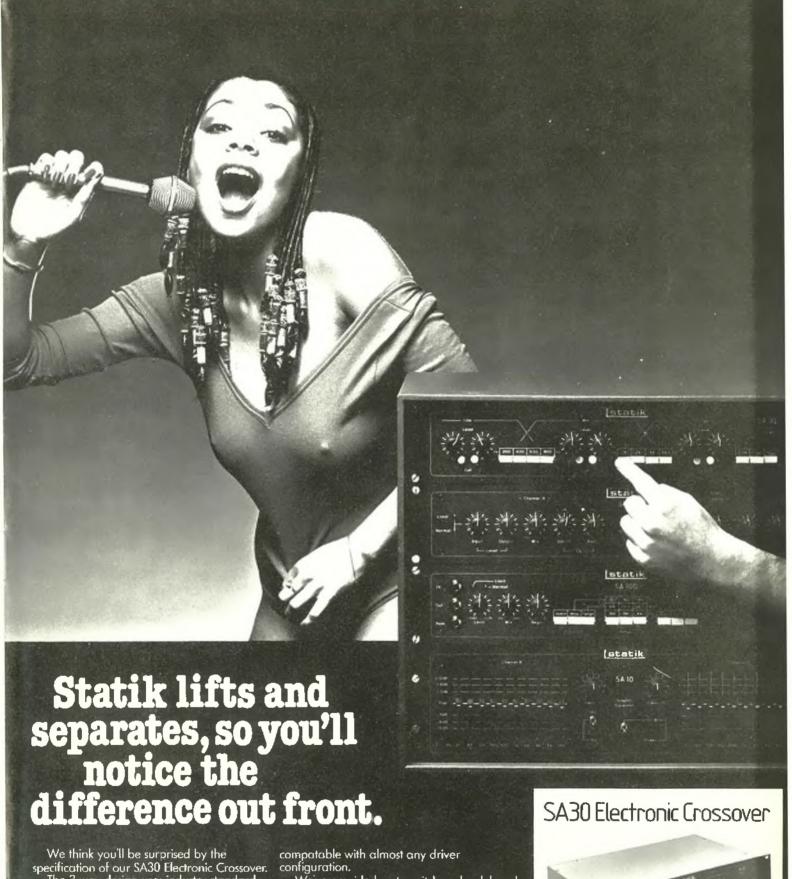
While Sigma guitars are less expensive than our handcrafted Martins, each Sigma must meet the rigid inspection standards established by CF Martin personnel. To see

personnel. To see and feel the DM-S and other Sigma guitars, visit your favorite music store displaying our Authorized Sigma Dealer decal. For information on the entire Sigma line including our solid spruce top models, the DM-18, DM-19, DR-28, DR-28H, DR-35 and DR-41, write:

SIGMA

CF Martin & Company Box 329 Nazareth, PA 18064

Martin & Sigma guitars are the official guitars of Opryland, U.S.A.



The 3 way design uses industry standard
18 dB per octave Butterworth filters, is switchable to 2 way working and generally outperforms even its most expensive

competitors.
With four selectable turnover frequencies at each crossover point, the SA30 is

We've provided mute switches plus delayed turn-on for all outputs, and included a unique 30 dB per octave subsonic filter to eliminate bass-driver 'modulation'.

We believe you'll find the price equally

surprising.



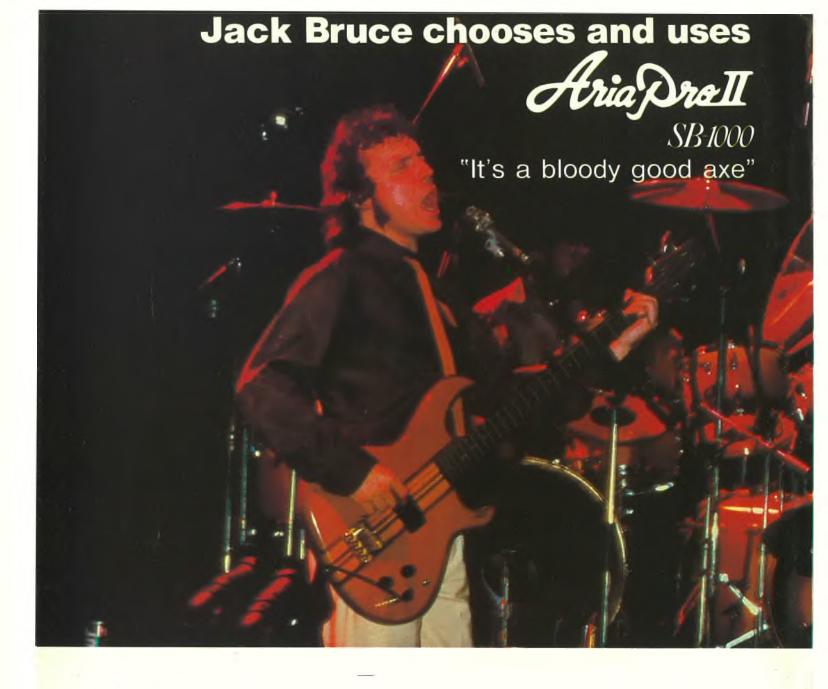
statik

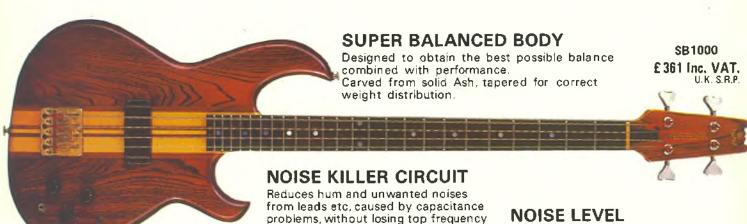
Please send information on Statik Acoustics, and the name of my nearest retailer To: Statik Acoustics (Dept. 2), Coppice Trading Estate, Kidderminster, Worcs Tel: (0562) 741515, Telex: 339821

IM/30

Address.

Tel. No ___





definition. Your amplifier reproduces

without external noises. Ideal for studio

only the sounds you want to hear

conditions(the Noise Killer is driven

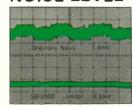
by 9 volt batteries and switches on

Life approximately three months

when Jack Plug is inserted.

with 2/3 hours per day use).

Long scale with 24 frets. Built with alternate 5-ply laminations of maple and walnut running right through the body for transmitting maximum string vibrations to the pickups mounted in solid timber.



Reduced Noise Level of the SB-1000 is much lower than in other gultars without active circuits, it is ideal for D.I. where very clean sounds are essential.



NECK





statik ACOUSTICS

Please send information on Statik Acoustics, and the name of my nearest retailer. To: Statik Acoustics (Dept. 2), Coppice Trading Estate, Kidderminster, Worcs. Tel: (0562) 741515. Telex: 339821.

Staccato Fortissimo

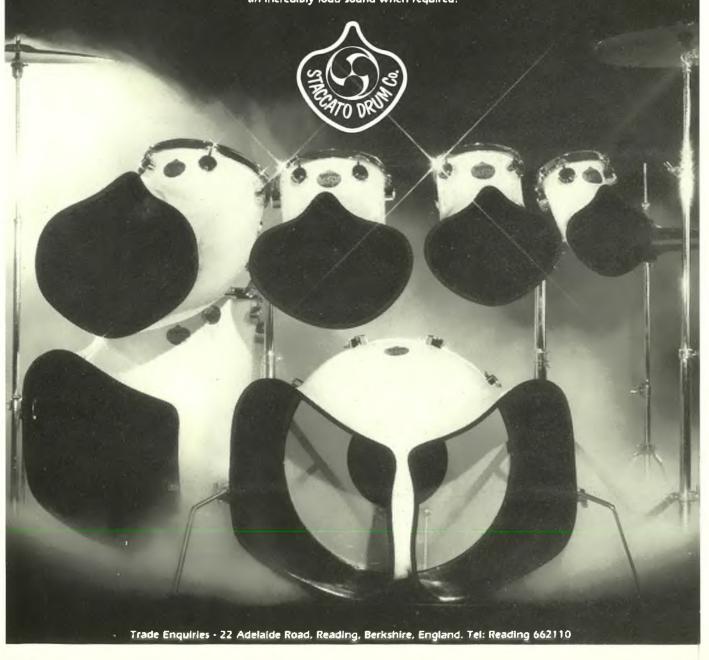
The Staccato Drum Co.

bring you a revolutionary design based on the world's oldest instrument.

British hand made drums based on the "Kadency" theory*, our futuristic shape of polyester fibre glass finishes are available in a variety of impregnated colours in stock sizes 6 8 10 12 13 14 15 16 concert toms and 22" bass drum.

Roll on Staccato's future in sound. The shape of things to drum.

"Kadency" * In which any volume of air projected through a controlled expanding shape, will have a great effect on the tonal resonance and distribution.
In simple terms this means; a varied colourful tone range plus, an incredibly loud sound when required.



DEALER OF THE MONTH

The town of Stockport doesn't conjure up too much of a glamorous vision for most people. Although there may not be too many "dark satanic mills" around, being close to Manchester probably guarantees a fair amount of grey days.

Still the more enlightened among you will know that Stockport became a kind of "Muscle Shoals of the North" when 10cc set up Strawberry Studios there. And it's no surprise to find a thriving music shop not a stone's throw away.

Actually Rhythm House, situated in Middle Hillgate near the town centre, has been in business a lot longer than the studio — 25 years to be precise, although it's only really been a group shop for the last 10. It was in 1970 that Graham Stuart decided to give up gigging, but he wanted to stay in the music business.

He remembers walking past the old shop as they were having a closing down sale. He nipped in, bought the stock which was £2,000 worth of rubbish, and set about building it into a decent group shop. In those days the arrival of the early Gibsons and Fenders was something of an event, and securing agencies from manufacturers was far from easy.

As business slowly built up, Graham recruited some help. Tony Rowlinson used to rehearse in the room above the shop and helped behind the counter on Saturdays. When the shop manager left, Tony became full time.

Drums is often something of a problem for a music shop, and although Rhythm House always carried kits, it is very much a specialist subject. Drummer Paul Holland became the latest recruit and soon sorted the percussion side out, The shop's line up is completed by Alan Thompson, is a full time musician who helps out when things get busy.

Having got the shop and the staff sorted out, the next big question was, "could the area support a music shop?" Tony answered, "There are always good times and bad times, but the music scene up here is strong. There seems to be a lot

Rhythm House Stockport





of places where bands can play. The big spenders seem to be the cabaret bands because there is good money in that,"

Alan added, "We're very lucky here because we've not only got club venues, but also a lot of pubs who put on live music. There's work for everybody as long as they're good."

Having Strawberry Studios close by is also good for business and helps spread the good name of the shop. Rhythm House don't do a hire service as such, but they do provide equipment for the studio. Often the bands appreciate the service and come back to buy gear.

The layout of the shop is excellent. Being on a corner they make full use of their extensive window space, and inside the shop is packed with gear but not cluttered. At one time all the gear, including drums, occupied the floor space, but now several upstairs rooms

have been made into specialist areas.

There is a drum room, of which Paul is naturally very proud, and a room for all the secondhand gear. There is also plans for a special "left handed" room, which would contain, naturally enough, all left handed instruments. This is a great idea considering the trials and tribulations that most left handed players have to go through to get an instrument. Incidentally, the stairs and walls of these rooms are crammed with guitars of all shapes and sizes from excellent copies to obscure collectors items like Vox and Burns.

As you may have gathered they stock all the top makes of instruments and equipment particularly Premier and Maxwin on the drum side, Fender and Gibson guitars, and HH, Marshall, Carlsbro and Laney sound equipment.

Service is something they pride themselves on, Paul car-

ries extensive drum accessories, repairs are available and they will often provide you with something to tide you over a gig while your gear is being fixed. The shop will also cater for the customers who are torn between two pieces of gear. Providing you are going to buy one or the other, they will let you take it out to a gig and change it if it doesn't suit.

Rhythm House also do a lot of second hand business and regard part exchange as an important part of their trade. Tony sums up the attitude of the shop by saying, "People aren't under any committment once they walk in — we'll talk for hours to a customer because we are interested."

So there you have it, the kind of shop that is well worth a look around if you want some interesting gear at a good price.

Oh by the way Happy Anniversary lads!

DIBBLE'S P.A. COLUMN

GENESIS

Venue: Coventry Theatre

Hire Company: HHB, London

The equipment set up as used by Genesis is probably among the most complicated of any touring band and in order to provide a reasonably detalled account of how the very individual Genesis sound is produced, we shall devote the whole of this month's PA Cotumn to this one concert.

Whatever else may have been written in the music press recently about the current activity on the Genesis front in respect of their current album *Duke* or the current tour, I consider that this was just about the best concert I have ever seen from any band and not being into the airy-fairy, slick catchphrase, smartass form of journalism that we all too often find in the music press, I shall simply say so in plain English.

The sound was good, the band were superb and the lighting, which incidently was provided by Lairhurst (formerly Rainbow Lighting) was fantastic. On this tour, the three original members of the band, Mike Rutherford, Tony Banks and Phil Collins, were joined by Chester Thompson who bore the brunt of the drumming so that Phil Collins was free to concentrate on the vocals, and Daryl Stuermer from the States to help out Mike Rutherford on guitars.

The stage was literally littered with instruments and equipment, with the particular set of equipment for each member of the band arranged to enclose a small area of the stage in which each musician played and generally did his thing. The general arrangement of these bays was to have the loudspeaker cabinets associated with the instrument across the back, the floor monitor cabinet and foot pedals across the front, and amplifiers, effects units, mixers, keyboards etc. down the sides. Instead of having a permanent bass guitarist, the bass was provided by Mike Rutherford, Daryl Stuermer or Tony Banks using either bass guitar, Moog Taurus bass pedals or by the bass sections of a Hammond C3 organ or synthesizers as happened to be

convenient for each number, thereby giving the band greater flexibility and scope than the constraints imposed when one member is permanently committed to playing bass only.

Darvl Stuermer played an assortment of guitars which included Shergold and Gibson basses, Ibanez and Suntec electrics and Alvarez and Ovation acoustics. The basses were played through two Sunn Coliseum bass amp heads and two Sunn 4 × 12 cabinets while the six string electrics were put through a Yamaha G100-112 combo - fitted with a JBL K120 speaker drive unit. via a multitude of effects units including an MXR digital delay line. Boss Chorus Ensemble. various Roland gadgets, etc.

The Sunn bass amps were directly injected into the PA while the Yamaha combo was miked using a Shure SM57. A Moog Taurus bass pedal completed the set-up. The selection of guitars used by Mike Rutherford was much the same as those used by Daryl except that the odd Fender appeared occasionally along with a 12-string acoustic. These were supplemented by a Roland guitar synthesizer and an ARP Avatar synthesizer. 1 could not determine exactly how this lot was amplified and fed to the PA, but it looked as though the basses were fed through an Ashley guitar preamplifier unit to an Amcron PSA-2 power amplifier feeding a pair of custom built speaker cabinets, each containing an ATC 12-inch long coil bass unit and a JBL 2105 five inch unit for the upper mids - and what an incredible bass sound he got with this set-up!

The six string guitars seemed to be fed through a Peavey Mace valve amp head, but this was apparently only being used as pre-amp to drive an Amcron DC-300A feeding a pair of Sunn 4 x 12 cabinets. Somewhere into that little lot fitted a Yamaha PM700 12 into two mixing console and a whole jungle of foot-pedal effects units including several small MXR graphics, an MXR flanger, a variety of Roland



Phil Collins.

volume pedals etc all screwed down and permanently wired on a large base board. Which pedal was used with what instrument, or what combination is anybody's guess and I certainly had no time to root through and make any kind of sense of it all! Another Moog Taurus bass pedal provided the finishing touch to Mike's amazing den of goodies.

Moving on now to Tony Banks' keyboards set-up, this included a Yamaha CP70 electric grand piano - obligatory in any professional keyboard line-up these days it would seem, a Hammond C3 organ, a Prophet V string synthesizer, ARP Quadra and ARP 2600 synthesizers and a Roland Vocoder all feeding an Amek M-1000 series 12/2 mixer which in turn fed an Ameron DC-300A and two-wedge monitor loudspeakers. Also included were a multitude of effects units including an MXR stereo flanger, a Boss Chorus Ensemble, an MXR DDL etc.,

Another amazing den of equipment personalised by Tony Banks' exact requirements — but of course, a large proportion of the individuality of the Genesis



Mike Rutherford,



Tony Banks.

sound is due to Tony's keyboards playing so one should expect to find great attention to detail in this department. Even Phil Collins' front microphone position did not escape the onslaught of electronic gagetry, as beside his Christmas tree of Premier tambourines was yet another of these Moog Taurus bass pedal units and a Roland CR28 Compurhythm synthesizer. Phil's drum kit was mainly Premier, with Ludwig Speedking pedal and snare drum, Slingerland hi-hat pedal and Paiste and Zildjian cymbals. Chester Thompson's kit comprised a greatly extended Pearl Concert kit, again with Paiste and Zildjian cymbals and a comprehensive set of Syndrums.

The stage monitor system was highly sophisticated and had been specially designed by HHB for the Genesis tour. Each individual "den" had a small 10-channel mono mixer included with the equipment. Sometimes this was incorporated into another mixing console serving other purposes, and sometimes it was a separate item. The output of each of these mixers was fed to the floor monitor cabinets in each individual den via an Amcron PSA-2 power amplifier and 27-band graphic equaliser. Each floor monitor was fitted with two ATC PA75-314 12-inch drivers and a JBL horn assembly.

The 10 input channels to these individual monitor mixers were fed in parallel from 10 of the output channels of a Total Audio Concepts 24 into 12 main monitor console. By this arrangement, any 24 channels as selected at a master patchbay are equalised and mixed down into 10 groups by the monitor engineer at the main monitor console with the final mix being achieved by each member of the band individually, in his own den, to his own personal requirements, using the small 10-channel mixers. Even the two drum kits and Phil Collins' vocal position are equipped with these little mixers.

It is a most ingenious and highly complicated system, with all the mixers interlinked by a multiway cable system running right around the stage. The system is further complicated by the fact that both drum kits are equipped with more sophisticated loudspeaker systems requiring three-way active crossover and that the crossover units for these, along with all five graphic equalisers, are required to be located at the main monitor desk position and not at the location of the final mix-

ers in each den. This means that output sends and returns between each individual mixer, its associated graphic and/or crossover unit as appropriate and the power amplifier(s) are all carried in the multiway in addition to the 10 mixed-down input signals! The remaining two output groups of the TAC 24/12 main monitor console are used to feed side fills and monitors at the desk position itself. It really is quite a system and seemed to work very well indeed, with HHB's Noel Mawer in what is probably the most demanding technical role of the whole show - monitor engineer.

Phil Collins' vocal microphones were Shure SM57's, while Mike Rutherford and Tony Banks used Beyer M88's. HHB are very much into these M88's for lead vocals and they certainly gave me a convincing demonstration by an A-B comparison between my own favourite - the Shure SM58 and the Beyer in their warehouse recently. Identical microphone types were used for the two drum kits, and these comprised the Electro-Voice RE20 on the kick drums, Shure SM57's on tom-toms and snares and AKG C451 capacitors on cymbals. A particularly appropriate selection in my own opinion and one which certainly produced a very exciting drum sound with plenty of attack and guts. It seems that almost everything else was Dl'ed - including the acoustic guitars which, as far as I could ascertain, were all fitted with pickups rather than being miked.

The main PA mixing console was a very large Amek M-1000 series desk in 48 into 8 into 2 format, although it was built in two actual consoles - a complete 32/8/2 main desk and a separate 16-channel extender console which fully linked up to the main desk on all busses. The desk has four auxiliary circuits to which were connected one of the new Eventide Clockworks H949 Harmonizers, a Dynacord DRS-78 digital reverberation system, a Bell BF20 stereo flanger and an Audio & Design F760X Compex-Limiter. Three DBX 160 limiters were also available for patching into the desk as and where required and one of the incredible new Nakamicci 680 cassette decks provided infill music.

Crossover was three-way active using specially modified Pro-Audio PA23 crossover/limiter units and room equalisation was by a pair of Pro-Audio PA27 third octave graphics. All the power amplifiers were Amoron which is hardly surprising since HHB now hold the exclusive UK franchise for Ameron, and most of these were the brand new PSA-2 models which have a rated power output in the order of 1,200 watts each. A few of the more familiar DC-300A's were also to be found here and there.

The main loudspeaker system was completely covered with black drapes and consisted of a pile of four JBL 4550 2 × 15 flared bins fitted with JBL 2220A drive units for bass, alongside which was a vertical stack of seven 2 x 12 direct radiator midrange cabinets, four JBL 2350 horns, one 2355 horn and two 2390 acoustic lenses all fitted with JBL 2441 compression drivers for the upper mids and four JBL 2402 fed from passive crossovers for the highs.

This stack was repeated on each side of the stage and in fact employed only half of the gear being carried due to the fact that Coventry Theatre is a comparatively small venue seating just over 2,000. Even so, the loudspeaker stacks occupied about half of the available stage width. The sound engineer was Craig Schertz of Showco, who, as Genesis' permanent sound engineer, had come over from the States for the UK part of the tour.

One or two other items of interest are that the main PA desk and all the associated auxiliary equipment is powered from an ingenious motorised variac which automatically regulates the mains power supply and has a particularly fast correction time. The other unusual feature is that upon arrival at a venue, one of the first operations is to set up a full instruments-come-electronics workshop backstage and for this purpose, Genesis carry with them a full set of electronic test equipment and rack upon rack of drawers of spare parts.

This Technical Room, as it is termed, is staffed by a fulltime, fully trained electronics engineer, Geoff Callingham, and it is reckoned that there is very little of the equipment that cannot be fully serviced and/or repaired on the spot. While the rest of the crew are getting the equipment set up on stage, and if there are no repairs to do, Geoff is usually busy making up leads, or designing and building some new piece of electronic gadgetry to add to the already terrifyingly extensive array of equipment used by the band.

Genesis' sound was good and the whole show is a masterpiece of technical production and co-ordination between the musicians on stage, their personal roadies and the sound and lighting engineers. I have however heard better overall sound quality, with more clarity and far better definition — especially at low frequencies, but handling far less complicated music and without the technical complexities of the Genesis stage setup.

Contrary to popular belief, Genesis were not that loud, with average programme sound pressure levels sitting between 96dB(A) and 100dB(A) and peaking at not much more than 104dB(A) although in my own opinion, this was quite loud enough and allowed the concert to be enjoyed without a ringing sensation in the ears or a temporary threshold shift being suffered afterwards. As I said in the introductory paragraph, I thoroughly enjoyed the whole concert and I really do not think that the audience would have any criticism to make at

RHYTHM HOUSE

22 Middle Hillgate Stockport 061 480 7371



Pearl

(jibsoq 🐎

GIBSON AND FENDER GUITARS IN STOCK

GIBSONS

New Les Paul Customs S/H Les Paul Custom S/B S/H Les Paul Standard S/B S/H Les Paul Deluxe Gold New R.D. Standard Nat New Firebird Ltd Ed Nat New Thunderbird Ltd Ed Nat S/H S.G. 3 Pick-up White New S.G. Standard S/B New S.G. Special Cherry S/H ES335 Bigsby Walnut New Ripper Bass Nat S/H Grabber Bass S/H G3 Bass S/H Firebird 1 1966 New The Paul New J45 S/B S/H J160E "1959"

FENDERS New Strat R/N W/T Black New Strat R/N L/T Sunburst New Strat R/N L/T Black New Strat M/N W/T Nat New Strat R/N L/T White S/H Strat R/N W/T Sunburst S/H Strat R/N W/T Purple S/H Strat R/N W/T Nat S/H Strat M/N W/T Nat S/H Strat M/N L/T Nat S/H Strat R/N L/T Nat S/H Strat M/N W/T Black S/H Strat M/N W/T White New Telecaster Thinline Nat S/H Telecaster L/H Nat New Musicmaster Guitar Black New Bronco W/T Black New Prec Bass M/N White New Prec Bass R/N Black S/H Jass Bass R/N Sunburst

New Musicmaster Bass L/H EXTRA DISCOUNTS GIVEN ON CASH DEALS



Rickenbacker





NO.

OPEN 10 YEARS 10 years of sales and service to the Northern Musician

Special discounts given this month to celebrate our 10 years. Special prices on guitars, amps, cabs P.A. systems, drums, effects. Open on 2 floors

DRUM KITS

New Musicmaster Bass Black

Premier Elite 5 drums, Gold: Premier Soundwave 7 drums, Silver; Premier Resonator 5 drums. Copper; Pearl Rock 5 drums, Green; Pearl Powermate 5 drums, Gold; Pearl Export 5 drums: Maxwin Funky 5 drums; Olympic 5 drums, Grat; Olympic 4 drums, Purple

DiMarzio

Marshall

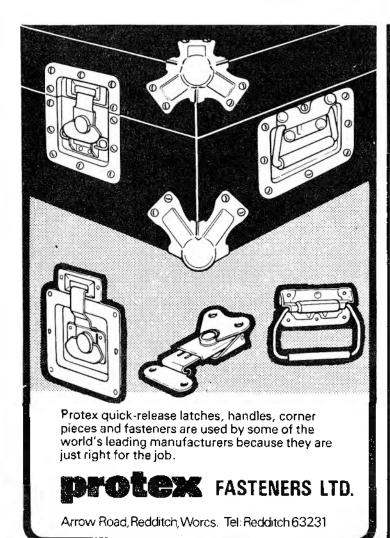


H/H MAIN DEALER

Biggest Stocks in the North Full Concert System in Stock



H.P. Available. Same Day Service. Top Part Exchanges. Why buy from us when you can pay more elsewhere?



John King's Drum Room

"HELLO, SLAGHEAPS SID SNOT 'ERE"

IF YOU WANT.

- 1. KITS THAT FALL APART
- 2. CYMBALS THAT CRACK
- 3. STICKS THAT BREAK
- 4. A POKE IN THE EYE (with anything you like)

DON'T COME 'ERE

FREE
1 PAIR OF STICKS WITH
ANY PURCHASE!!!!!!

RING THE HOT LINE (HELLO) ON.

546-9124 Drums (Mike) 546-9100 Guitars, Amps (Graham)





HIGH PERFORMANCE D.I. BOX AR116

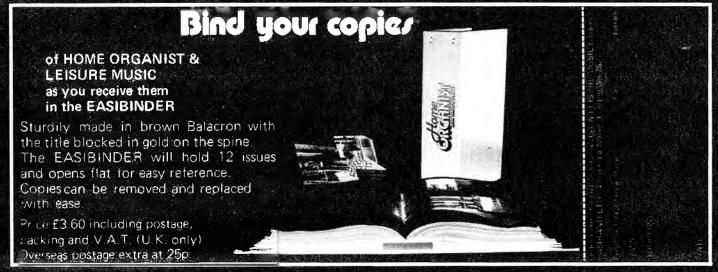
This beautifully made accessory is now available for demonstration.

Manufactured to the highest practical standards, the AR116 features:

- Switchable input attenuator for guitar pickups, line level outputs and amplifier outputs.
- Two position low pass filter.
- Earth lift switch.
- Very high impedance input amplifier, which does not have a loading effect on pickups.
- Balanced fully floating output, for studio or PA desks.
- Two battery system. A flashing LED indicates a battery failure, while the AR116 continues to work, automatically powered by the other battery.

ARS

AUDIO REINFORCEMENT SERVICES LTD. 216 Archway Road, London N6. Telephone 01-341 1506



FREEDMAN'S The East End Connection

For many musos over the years, the area of Leytonstone on the border of London's East End and Essex has been synonymous with the name of Freedmans. It is the kind of music shop which, for so long has become so much a part of the local social scene as well as the music one.

As with all businesses, music shops are hit by the ups and downs of the economy, so it's reassuring to find one well established store you can rely on to provide the necessary services year in and year out.

Such a shop is Freedmans, and they have built up an enviable reputation which stretches far beyond the confines of London and the South East, although they weren't always so well known.

The story begins a long time ago with a couple of blokes selling accordions from a stall in Petticoat Lane. To prove just how good the merchandise was, they used to play the squeezeboxes to the would-be buyers.

The two stall holders were George Deutz and Alf Freedman, and they started a business which grew and grew until today it occupies something like 4,000 square feet of selling space on a prime sight in the High Road at Leytonstone. The company is still known as Freedmans and the boss of the organisation is the son of George Deutz, Derek.

The original shop was much smaller than the present day one, and situated further down the road. It continued to put its faith in accordions, but pretty soon, plucked strings ousted blown reeds as the most popular instrument and George and Alf realised that they could no longer depend solely on accordions.

Within five years the shop was catering for all musical instruments and as the Sixties approached, so did electronics. The Sixties were a boom time for musical instruments and it wasn't long before new premises had to be found.

Despite the growth in business the move still produced some anxiety and Derek remembers thinking that they would have to spread the stock pretty widely so there wouldn't be too many empty spaces!

The premises themselves consist of two adjoining shops which have been interconnected by the simple process of knocking a hole through the intervening wall, which nevertheless is an artistically pleasing hole.

This gave them about 3,500 square feet of space which soon filled up with organs and brass as well as the burgeoning guitar and sound equipment products of the rock scene. While there is still room for a shelf displaying accordions, it is the rows of guitars and amplifiers which dominate the showrooms these days.

Steve Thomson is the man in charge of the group gear side and he persues a policy of stocking top quality instruments which give value for money. On the guitar side these include Ibanez, Kramer, Wal, Washburn and Guild. For amplification you need not look anywhere else because it's all here. The new Performer range from HH takes pride of place alongside Laney, Marshall, Intermusic and a host of others.

Freedmans stock a wide range of percussion which features kits by Premier, Rogers, Tama, Pearl and Maxwin, in addition to a comprehensive range of congas, Latin percussion and marching band gear. Synthesized drums and a large variety of spares mean that the store is somewhat of a drummer's delight.

With such a large shop, it means that everything is well laid out and easy for the customer to see and try. Drum kits are set out and there is a special soundproofed room where amps and synths can be played without disturbing anyone else.

Service is the watchword for Steve and his staff, which is why their clients range from the top bands like Wings to the youngster buying his first instrument. Customers come from afar afield as Manchester and Europe, the latter obviously benefitting from the easy access to the cross channel ports of Harwich and Dover.

Because they are long established, Freedmans have their customers returning time and time again. They are on such good terms with manufacturers and distributors that if they haven't got a certain item, then it can usually been sought out in no time. Good competitive prices are another attraction for customers.

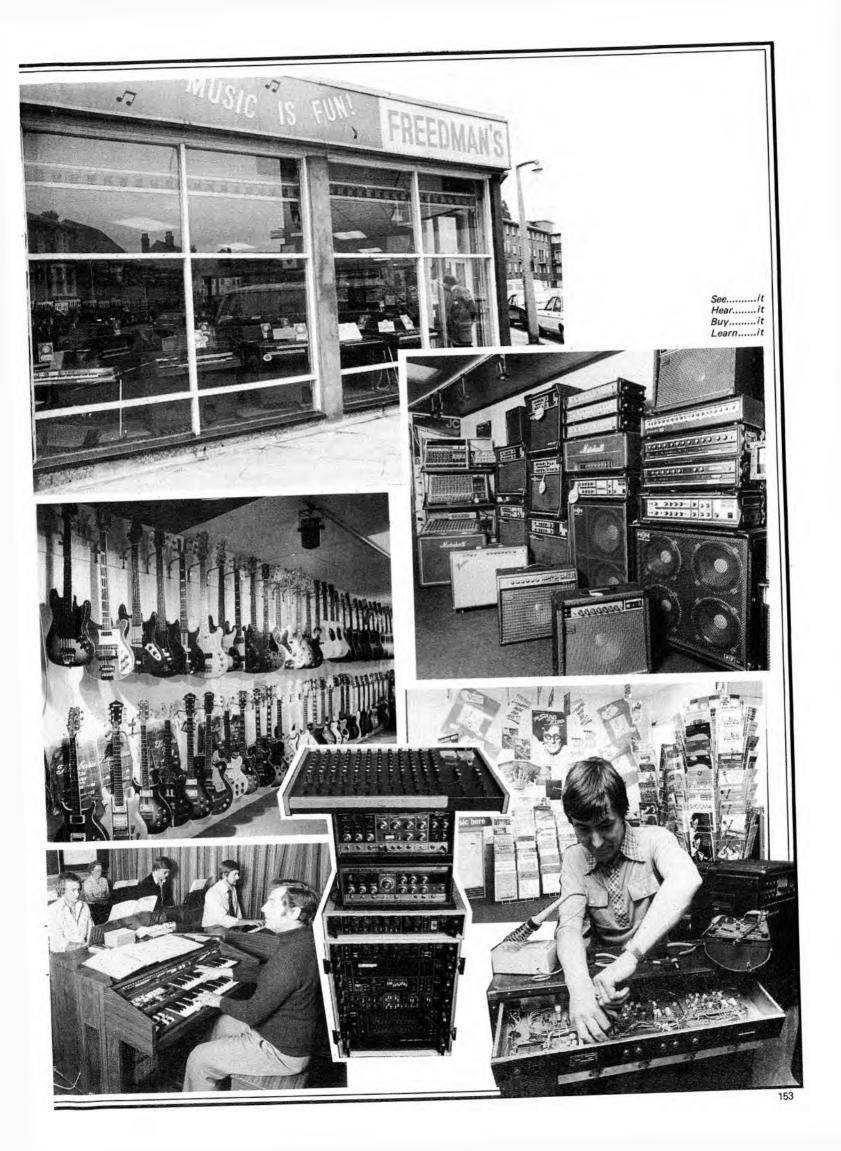
It is also worth noting that they also run one of the Yamaha Music Schools which sees about 100 pupils a week coming for lessons on the organ. The shop incidentally carries a full range of beginners and educational instruments plus items such as ukeleles and mandolines. There are also a couple of repair workshops on the premises, and a small manufacturing and customising service is included.

In addition to Steve on the group gear side, there is Chas Hodges who specialises in drums, and Mad Mac who lurks around the drum cellar. All have experience as gigging musicians.

Because of the way the business has been built up, it seems that a store like Freedmans will continue to prosper. They are far removed from the fly-by-night operators, who might not be there when you want to take back the amp which has blown up a week after its purchase.

Freedmans can't afford not to care about their customers or else they would have gone out of business a long time ago. The fact that the business has actually grown over a long period of time speaks for itself.





YOUR GROUP ON Video Cassette Demos from £100

Now you can put your group in the proper perspective, make those Record Company A&R men turn their heads.

Capture your image as well as your sound. HIRE us to record you in full colour on a V.H.S. Video Cassette. The ultimate in promotion.

In the - Studio - Live Shows - Practice Sessions & mobile venues.

Also any personal event.

Prices begin at £100 for your own exclusive T.V. Production.

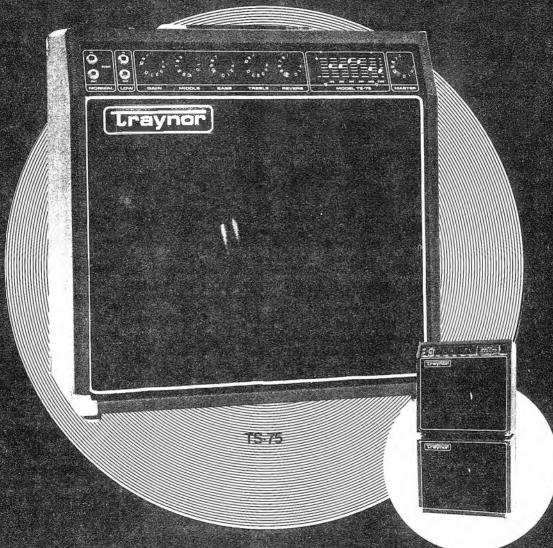
contact Martin Marston Loudwater Television Service Phone:- High Wycombe 39291





Graymor

BY YORKVILLE SOUND



The Professional

Available with Extension Speaker TS-75-ES

There is a trend among today's professional guitarists to look for high performance in a compact amplifier.

The TS-75 answers that need and provides a wide range of professional features like footswitch-activated E.Q. and Boost with LED indicators fully balanced Line Output, dual Inputs with parallel Outputs and a premium grade 15" guitar speaker with an 80 ounce magnet, 3-inch voicecoil and cast frame.

But the most professional feature is the PERFORMANCE. We invite you to compare the TS-75 to any amp in its class. For power, performance and versatility, the TS-75 is THE PROFESSIONAL

IF YOU FEATURE QUALITY AND PERFORMANCE YOU SHOULD FEATURE TRAYNOR

For Dealer Enquiries Write to: YORKVILLE SOUND, 80 MIDWEST RD., SCARBOROUGH, ONTARIO, CANADA M1P 4R2 OR CALL (416) 751-8481

U.K. Agent: Mr. Rex Bray, 20 Poplar Avenue, Heacham, Norfolk, England.

inse 851 an fleader Service Card

HIFIFOR MUSOS

Three Systems For Reference

It is much trickier putting together a system for general consumption than it is to set up a pecking order for a given component category according to given parameters. The constants involved rarely allow unequivocal recommendations.

One individual's opinion must ultimately differ from another's even if this is merely a matter of degree and the same applies to the elements introduced by the listening room concerned in which any evaluation takes place. The higher up the hi fi tree we progress the finer the lines of differentiation we need to draw as it is only in these finer virtues that any justification is found for the increased cost.

Out of the range of better designed products at each level of cost our three systems are ultimately only a point of reference for the sake of the argument. Within each individual system examination, alternative choices are therefore given.

Choosing for keeps

It is only the hi fi buff pursuing a hobby, who needs to upgrade his equipment because better gear arrives on the market, A first priority when putting together a system is that the basic lineup should be chosen to provide many years of service; this is synonymous with value for money. It is therefore often wiser to drop one component when budgets are tight in order to gain higher overall results. This is where hi fi separates allow you room to move; to accommodate your growing requirements.

Juggling your budget allocations accordingly calls for an awareness of your personal needs and of future technological possibilities. According to these you may be able to decide which component to skimp on, and those you ought to put an emphasis on if your ultimate means are beyond your present means. In a system with a full component of sources - disc, tape and radio — it is rarely wise to drop below a figure of £400, for example.

Over the past few years



amplifier and speaker technologies have advanced by leaps and bounds. It is, for example, therefore possible in a mid or top-budget system to buy the superb little NAD 3020; gambling on an even higher level of performance later on at an effectively lower cost.

Cassette performance has seen a similarly inspiring rate of advance over the past three to five years. Two specific innovations — metal tape formulations, currently at too high a premium to catch the biggest market, and Dolby HX processing — each promise high gains which ultimately should perculate down to lower grades in the hi fi order. You might thus make your savings on the cassette component when costs are tight.

Unless your tastes include the straight music programming the BBC puts together so excellently, there is not a lot of real value in a tuner. A tuner is not worth a lot of fuss unless you record live rock concerts off the air or decide to aim for long distance reception with an ambitious aerial array on your roof. Live recordings can become precious in the longer term.

Going cheap on your disc player should not incur the penalty of actual harm done to your discs — these become quite precious when replacements are no longer available. The advent of the video disc plus the possible, though later, impact of digital sound chains over the next five

to 10 years begs the argument that you ought, maybe to make today's turntable purchase your last — you are, after all, hardly likely to shed your hard-won repertoire of analogue LP discs simply because the storage media has changed.

And there, in a nutshell, we have it. In the classic manner of hi fi writing the recommendations manage to avoid coming down on one side of the fence or another and you are still left with the good or bitter experience of using your own judgements. What better homage could be paid to your individual ability to choose wisely?

Low budget system £400-£500

Signal sources: 1. Ortofon FF15e magnetic pickup cartridge. £24. Picked out of a roster of quality budget devices including the ADC QLM 34 III, Signet TK 3E, Pickering XV15/625e and Stanton 500EE, the FF15e works with medium-mass arms and has an elliptical stylus tip of reasonable quality and comes fitted with a flat equaliser which usually ensures that the frequency response is kept even with the right amount of loading capacitance; recommended by the marker's at around 400 pF.

2. Sansui SR222 Mk.2. integrated manual record deck. £60. Picked out of a competi-

tion counting the Dual CS606. Bang & Olufsen Beogram 1500, Philips AF677 and Pioneer PL512 the 222 II is simple, well engineered and very attractive in appearance. For a budget deck the pickup arm is particularly commendable, with a fair balance of merits both in engineering and adjustment senses. The par-for-thecourse rubberised feet fitted, mean a quite solid surface is required for the deck to stand on if it is not to pickup vibrations which colour the sound; at worst generating some feed-

3. The **Hitachi D33S** is a metal-capable cassette deck which provides for reasonable recording accuracy with a peak light. The meters on all but the best of decks above £150 or so rarely respond fast enough for accurate levels to be set. A flash, on programme peaks, is all you need, really, to make sure you fully exploit the tape without distortion. The power-assisted controls have a nice feel, allow the direct transfer between transport modes.

Noise on the electronic circuits is commendably low if you leave the DIN inputs alone though the microphone input needs a fair amount of gain to get them working. The D33S has something of an edge in its league against the likes of the JVC KD A2 and KD10, the Rotel RD 300, Aiwa AD M200 and TEAC CX210, which all come close for value.

The amplifier chosen to fill the centre spot is the NAD



3030 (£90); a 20 watt per channel integrated unit with a fine sound and an excellent standard of engineering. The 3020 features what the maker's describe as a "soft clipping" circuit which prevents the amplifier sounding rough on high modulation peaks at high gain — and it works.

At the speaker end a pair of KEF Celeste III have been chosen. Designed for open stand mounting, the Celeste III is a two-driver system finished with a black wrap-around fabric which looks quite good against the black of the amp and turntable. Like the amplifier the speaker could easily find a place in a system of higher quality. In this league however a purchaser might also look at the Wharfedale Laser 200, Castle Acoustics Richmond 2. Celestion UL6 and Ditton 22, KLH 317 and Bowers & Wilkins DM11 if the aim to find a pair of low-ish to low colouration speakers of reasnable efficiency which will cope with rock music.

All together now!

Smooth is probably the best description for this remarkably cost-effective lineup of components. The clean presentation of the amplifer fed via a basically quite neutral cartridge works well with the relatively dull presence of the loudspeakers to create an "untiring" sound, free of any objectionable stridency. The amplifier, despite its 20 watt rating will provide very high levels of sound which the speakers accept without demur. The stereo imaging, whether from disc or tape, was maintained.

It was nice to see good control over high rise transients without the sibilant compression effects usually experienced at this sort of price. Colouration in the midband was really to be expected; this was largely the fault of the speakers though again not unnacceptably so. Changing the speakers for the Lentek S4 from our mid-budget system and later the turntable for the Thorens TD160S/SME3009 made an appreciable difference. At the end of the progress however the basic combination has to gain a very hearty thumbs up.

A tuner was not included for the tests though a Sansui TU80, Pioneer TX408 or Trio KT5500 should admirably fill the spot for £60-£95. Where amplifier options are sought the Trio KA400, Sansui AU 217 II, JVC JA S22 and Akai AM 2250 come to mind.



Mid-budget system £900

Programme sources: 1. Ortofon M20FL Super magnetic cartridge, £55. 2. SME 3009 Series II ND universal pickup arm; fixed head version. £60. 3. Thorens TD160S 2-speed motor unit; a "souped up" version of the already quite superb TD160 BCII. £140. 4. Sony TC K81 metal-capable 3-head cassette deck, £250, featuring variable bias and sensitivity/Dolby level, logiccontrolled solenoid-assisted transport and Bar Graph peakreading meters. Amplifier: Sansui AU317 Mk.2 65 x 65 watt DC integrated, £160. I Loudspeakers: Lentek S4, | £250/Celestion 551, £350/Harbeth HL, £300.

An undoubtedly impressive array of components in what is, arguably, the most satisfying price area in which to find oneself; an area where an unneurotic music-lover with a rational eye on cost-effect can reap very sound rewards indeed. The competition in this region is fairly severe.



Out of the fineup chosen for reference the Sansui is not necessarily the best sounding amplifier available for the cost and the same applies to the SME 3009. A moving-coil pickup cartridge may have provided better results while the deletion of the cassette component will have left a bigger budget to devote to a superior disc-playing system.

There are various specialist manufacturers, mostly British, making fine sounding devices which the hobbyist will always prefer. Among amplifiers the A&R A60E, Sugden A48 II, Quad 33/303, Rogers A100, and items from the ranges of Nytech, Exposure Electronics and others may often provide that nth factor a hi fi buff seeks. Among disc players the Rega decks offer exceptional performance at just over half the cost of the TD160S. It is precisely here that the hi fi treadmill begins.

There are reasons and good ones why these products have not and probably never will reach a wider audience. The degree of involvement it takes to discover and make the most of the more esoteric 'purist'

goods, even where these are moderately price, extends to more than reading International Musician. Above all else the accent behind our midprice reference system is practicality. To this end the equipment chosen is freely available at retail outlets around the country and do not necessarily need an enthusiast to set them up for optimum performance. The tuner component here again has been left out of the basic system. Interested parties might consider an Optonica ST5100, a JVC JT V6 or Sony ST 560 as examples of good value. For less exacting needs one of the budget tuners earlier mentioned should suf-

'Super fi' system

Programme sources: 1. Mission 773 high output movingcoil pickup cartridge, £140, Mission 774 pickup arm, £140. Systemdek two-speed turn-table. £250. Tandberg TCD 440A 3-head cassette deck, metal-capable and featuring variable bias, adjustable azimuth, Dyneq equalisation and Actilinear recording, £540, Optonica \$T7100H AM/FM tuner with analogue/digital tuning indication, switchable IF bandwidth, auto-lock and recording calibration tone generator, £189.



Quad 44 pre-amplifier; featuring completely modular input circuitry, variable filters plus tone controls. £270. Trio LO 5M "high speed" singlechannel DC power amplifiers.



HIGH SPEED AMPLIFIERS: IS ONE MILLIONTH OF A SECOND FAST ENOUGH FOR YOU?

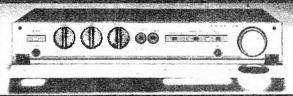
Anyone can design an amplifier which will reac fairly quickly to a sudden complex sound a cymbal for instance). And most people do.

But to design an amplifier which will react in less than one millionth of a second is rather more difficult.

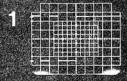
Such an amplifier must by definition have a very short, rise time, and a very high 'slew rate; particularly for high, frequencies and at high outputs.

If it doesn't, the output will be distorted, because some of the signal components will be de ayed and will emerge out of phase with the rest.





What are 'rise time' and 'slew rate'?





The charts show you. No. 1 defines the input

The chaits show you. No. 1 defines the input signal. Neat. Square.
No. 2 shows a conventional amplifier response. Look at the rise time (A to B). Look at the slew rate (the slope between A and B).
Now look at Chart 3, taken from a Trio high speed amplifier. See how close both rise time and slew rate are to Chart 1.
Finally, look at the additional distortion at the lop of the slope on Chart 2. It shows how a conventional ampline in attempting a high

conventional ampline in attempting a high speedrise over spoot, and makes things

even worse. Tric high spend amphiliers have totally integrated circuits which give a *controlled* stable.

rise time of 0.9 microseconds or less:

Only your ears can tell you how important a millionth of a second can be. Try them

But send the coupon and read all about it first.



Please sendime full information about Trio high speed amplifiers, and the name of my nearest dealer.

NAME_ ADDRESS. PHF5

Exclusive United Kingdom Distributors: B. H. Morris & Co. (Radio) Ltd., Precision Centre, Heather Park Drive, Wembley, Middx. HA01SU. Phone: 01-902 9422

HIFIFOR MUSOS

£595. Bowers & Wilkins 801 phase-compensated, 3-unit free-standing loudspeaker systems. £850.

The **Mission** arm and cartridge make an almost faultless combination, and so they should. Structural rigidity in a pickup arm appears to have as much correlation with the ability to resolve finer recorded detail as the suspended subchassis principle has with high performance turntable.

The 774 uses a paired race of tempered steel at the pivots which allow very little un-wanted "play" in the bearing. The low mass aluminium arm tube has a vestigial cartridge fixing block brazed on its tip and detaches only at the pivot. The loss of rigidity caused by headshell collar fixings is thus sidestepped. When you remember that the finer recorded detail on a disc is only a micron or less long, this sort of attention to detail is the difference. There are again only a handful of arms and cartridges are competing in this league.

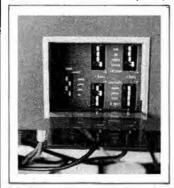
The Systemdek is a relatively new force in the arena for good sounding disc players where the competition literally is counted on the fingers of one hand: the Ariston RD11S, JBE Series III, STD 305S,. Technics SL10 and the ubiquitous Linn Sondek LP12. The Systemdek is picked not only for its indubitable high placing among these few, but also for its superbly rationalised design. Executed in an attractive variety of suede-textured Nextel finishes with a lambswool flat mat bonded to the heavy (4.7 kg/10.5 lbs.) platter, the deck is AC synchronous belt-drive using a stressed alloy subframe floating on an undamped three-point spring suspension which offers a near ideal suspension resonance below 4 Hz. On acoustic and structural vibration breakthrough from the listening environment it is in the excellent class.

Among its many strengths the Systemdek attacks headon many of the bugbears which so often consign decks of this status to the committed hi fi enthusiast. The main bearing is a steel spindle turning in an oil bath on a precision ball bearing. A spiral groove up to a keeper at the top pumps oil up the spindle as it revolves. A

smooth turning bearing which has effectively no metal-to-metal contact between spindle and bush results. The principle creates, between the spindle/bush interface, an oil buffer pumped continuously at pressure — and here is the master stroke. The high pressure lubricant does not compress easily and the low-friction layer is therefore also quite rigid.

What the design succeeds in doing is to remove the critical (and costly) machining tolerances usually mandatory in a deck of this singular calibre; after all is said a tight production tolerance is the beall of a good design executed on a flow-line, whatever the cost or boasts offered. Access for the patient task of balancing and levelling, crucial to optimum results, is made without having to turn the system upside down. And here is another master stroke. Operational drive stability, wow and fluttter, and low frequency residuals taken into account with the remaining heirachy of performance parameters the device is little short of marvellous and a delight to handle.

The tuner included in the basic top system is the Optonica ST7100H. This tuner proved itself capable of long-distance 'D-X' reception at our North London location via an ambitious aerial array and a quite superb BBC/IBA quality



via a simple indoor dipole. Tuning is via an abbreviated analogue scale next to which is a digital frequency counter readout which reads in kHz for AM. Two 7-segment indicators — a centre-tune row of LEDs and a logarithmically scaled signal strength bar — allow for a high degree of tuning accuracy.

Along with these tuning aids an 'auto-lock' circuit is provid-

ed to correct small tuning errors. Of the row of eight push buttons on the fascia three special application features deserve attention. The switches labelled Multipath, Air Check and IF Band Width are valuable aids to the full exploitation of a tuner's potential benefits. These will be discussed next month in the system assessments.

Backed by a commendably high order of VHF performance the accent behind the range of controls provided is accuracy and the ST7100H makes tuning precise and very easy — a winning blend of virtues.

And so to our final source. The basic clutchless three-motor transport mechanism is one Tandberg have used with a dual-capstan tape load and solenoid assisted logic controls in their decks over the past few years. Advanced circuit features have been added to arrive at the prestigious TCD 440A. An examination of features becomes an examination of the basic premises behind cassette hi fi.

At 15 ips or 30 ips pro open reel decks rarely require much high frequency record equalisation. At its standard speed of 1.7/8 ips a cassette format might require as much as 30 dB of hi pre-emphasis at 18 kHz to provide a flat response. At higher recording levels this amount of boost limits the highest magnetisation levels the head drive circuits can be allowed to pass if tape distortion and higher compression are to be avoided.

The development of higher bias tapes capable of handling higher magnetic flux densities raises the mean signal-to-noise thresholds by allowing a higher signal handling capability at low and middle frequencies. An increased tape coercivity on the other hand improves high frequency performance. (Coercivity is a measure of the current and biasing levels required for a flat frequency). Higher bias ferric tapes, bearing usually the suffix 'I', and the even higher bias suffix 'II' types aim at providing higher recorded densities with less tape saturation.

Metal particle tape is, of course, the current state of the art. Interfacing the precise magnetic characteristics of a

tape with the machine circuits is more crucial with hi fi recording on cassette than it is with high speed open reel. And here basically is the problem. The successful storage of high frequencies call for fairly exact machine adjustments to meet the requirements of the tape in question. A manufacturer might set up the machine on a specific brands of tape and offer unequivocal tape recommendations. The provision of



user adjustments is more expensive though ultimately the best way of providing for an ongoing flexibility in the light of possible future developments.

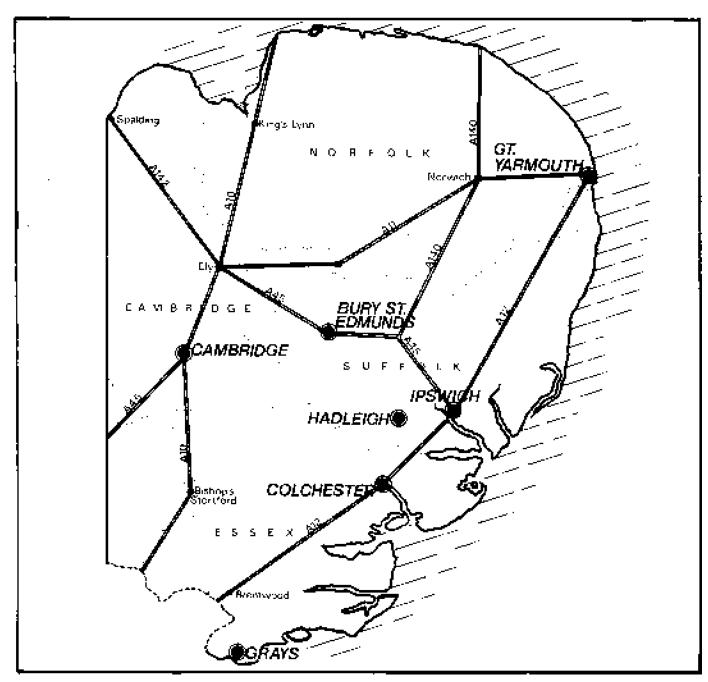
The technique described as actilinear is Tandberg's way of attacking what is basically a head drive slewing problem and is as successful as the best of alternative techniques adopted by others. More interesting perhaps is their Dynamic Equalisation System (Dyneg) which has similarities with the Dolby HX system. the high frequency boost is varied by a form of peak limiting circuit which tracks the applied treble pre-emphasis up and down with the programmes hf content.

Whereas full recording equalisation is applied at low signal levels the amount of boost tides with the programme to a point where it theoretically reduces to zero at the highest recorded peaks. As the circuit is tied to the head drive circuits the zero point occurs just before hf tape saturation takes place at any particular tape setting. And it works. More on how it actually performs next month.

Next month we look at how the systems actually work together in the hope that some light is shed on some of the finer points of matching and interfacing.

James McGill

SPOTLIGHT ON ESSEX & EAST ANGLIA



Tim Gentle Music Leigh on Sea — Essex

Tim Gentle Music is a business which has grown from a humble beginning to a flourishing success story. Over the years they have expanded from a small shop on one side of a large building, gradually knocking down the walls and taking over more and more space until in 1979 they finally took over the whole building. And they say they still haven't got enough room.

They specialise in guitars and also sell amps and cabs. They stock "A hell of a range of left-handed instruments"

which is rare. Staff consists of Tim and wife Ruth, Dave (guitar repairs), Phil (amp repairs), and their big claim to fame, Robin Trower's little brother Brad, who apparently looks just like him, plays just like him and on the same guitar!

They stock loads of secondhand gear as a result of their excellent part exchange deals, so if you are looking for accessories or rare guitars this is certainly the place to go. Their address is 1420 London Road, Leigh on Sea, Essex.

Quentor Electronics Norwich

Quentor Electronics are manufacturers of amplification products — everything from small speaker cabs to large bins, all incorporating a wide range of speakers. Their products are all custom made. Another side of their business is building flight cases. They also furnish their local bands with PA, and supply equipment to many varied customers including Anglia Television.

Drum and Guitar Centre Cambridge

The Drum and Guitar Centre make their business clear with their name. They stock only drums and electric guitars and

accessories, including amps. It has existed in this form since 1974 and is situated in Norfolk Street, Cambridge.

The proprietor Bernard Stubbings was a professional drummer for 25 years and therefore knows what he is selling! His son is a guitarist and runs that side of things, and they employ a staff of musicians. Their stock consists of practically all makes of drums, guitars and amps. They do no hire but there is a certain amount of second-hand gear available.

Spaceward Studios Cambridge

Spaceward is a 16-track recording studio which is in Victoria Street in Cambridge. They have one facility which is not often to be found in a 24-track studio let alone a 16-track and that is video, for which a very attractive deal is offered. They have all the usual facilities and also offer production, arrangement, and location and live recording. There is no overtime charge. Their phone number is (0223) 64263.

Cambridge Rock Cambridge

Cambridge Rock is a music store staffed by Steve, Marc Noel Johnson (manager), and Mick Webb. They are at number 44 Newnham Road and have been doing business since 1976. They sell all electric guitars and group gear, and have a customising section and an amp repair service.

They have quite a large PA hire thing going which they will go out and engineer for a band. Their special feature is that they are "no messing, straight guys who will provide a good backup and make a point to treat our customers as humans, not monkeys. And we're both handsome".

Steve and Marc are both exprofessional musicians — Steve on keyboards and Marc on guitar. Thus they have experienced the whole field of playing, including studio work and are equipped to deal with customers' problems on both the musical and technical levels. They are very critical buyers and all their stock is carefully chosen for value and quality.

Sowter Transformers lpswich

Sowter Transformers are a small family business who were founded in 1941. They are specialists in audio frequency transformers, including mike transformers, output transformers and bridging transformers, and in fact supply approximately half the major UK manufacturers.

Their products are custom built for the customer's circuit, and their policy of very reasonable prices and readily available friendly advice has always paid off. Dr Sowter will "always be pleased to look at your technical problems personally and ensure that you receive transformers with optimum performance".

Other areas they specialise in are 100 volt line transformers and loudspeaker transformers. Basically they manufacture many hundreds of designs which can suit most requirements. They endeavour to find out what the market requires by sending out questionnaires to find out about any problems and then eliminate them. The company is noted for its good service. Because of its size they are able to be very flexible about things like delivery and always do their best to suit the customer's convenience.

Honky Tonk Music Hadleigh, Essex

Honky Tonk Music was started in 1975 by exprofessional drummer Pete Brewer. They started out with one shop, added the shop next door in 1976, and in 1977 the wall between the two was knocked down turning it into its now large and spacious form.

The shop manager is Phil Straker, looking after the guitar and keyboards section, and the drum shop manager is Gerard Beart. There is also a full-time engineer working in the service department and he is Dick Straker, Phil's dad. Pete Brewer is the big white chief.

They specialise in group gear, i.e. they have no electric organs, mandolins or even acoustic guitars. Consequently they are able to stock a large selection of the things they specialise in. As far as drums are concerned they have the agency for every make that exists, mainly because they are the only drum shop in the South East Essex area. Stock consists of an extensive range of guitars, amps and keyboards.

Accessories are very much a feature since they consider these to be very important. They stock over 1,000 drum heads which are on show in racks for customers to see, they have about 1200 pairs of drumsticks — all makes and sizes, and about 150 cymbals. You will also find about 40 new

drumkits and a large number of second-hand ones as well.

They do quite a lot of second-hand gear and have found that there is a good market for it in the area. Any second-hand gear comes with a six month guarantee. Honky Tonk is situated at 300-302 London Road, Hadleigh, near Southend.

Allen's Music Great Yarmouth

Allen's Music can be found in Broad Row in Great Yarmouth, Run by Eric Lund and John Allens they deal purely in group gear — guitars, amps, PA equipment and keyboards. They also own the shop next door and there they deal with educational instruments. Thus the two areas are clearly defined.

The group gear side of things has only been in operation for 15 months and they have recently expanded it. They now have four show-rooms — three on the ground floor and one upstairs. One of these is reserved solely for percussion and keyboards.

A special feature is their own range of PA speakers and they specialise in house systems for holiday camps etc. They have a workshop with Eric Lund as the resident engineer. Resident guitar repairer is Clive who came from John Birch. They stock a wide range of everything, specialising in Peavey amps. They also stock a good range of AKG, Shure, and Beyer mikes. The hire service includes PA gear up to 1500 watts.

Sounds Plus Bury St Edmunds

Opened in November 1979, Sounds Plus deal in group gear and a bit of disco but the two things are in completely separate departments. They are the main dealers for HH and stock a wide range of all the top makes — Marshall, Carlsbro, Maine, Vox, Laney and Roland. In the guitar line they sell a good range including Gibsons and Fenders, and also the usual selections of copies such as Antoria.

The shop is run by partners Ray Broome and John Balaam, and the manager's name is Nigel Heffer. Nigel also has an assistant in Sue Tovey.

The shop also does quite a lot of second-hand gear. They don't aim to be a "discount" house prefering to concentrate their energies on giving a good service and making sure that they stock what they have said they do etc. Hire is something that they are already doing on a relatively small scale and within the next month or so they will be converting the shop next door, which they have just bought, into a PA and Gear Hire Centre, Another very handy feature of this shop is the repair department where they can cater for anything including guitar refinishing, refretting and respraying.

Sounds Plus can be found at 6-8 Risbygate Street, Bury St Edmunds, which is in the middle of Suffolk where everybody "wears Wellington boots and walks around with a straw in their mouths". (Well that's what the man told me.)

Axe Music

Axe Music, specialising in good quality guitars and amps, are at 16 Mersey Road in Colchester. They operate a PA hire service, and their repair workshop caters for electronic and guitar repairs and also customising.

They have a dealer franchise with many of the main companies including Maine, Traynor, Acoustics, Ibanez, Yamaha, Odyssey, Martin and the new Vantage guitars, and they stock Dean Markley strings.

The staff are all guitarists, Dave Harwood being the manager and Alan Gray owns the place. Dave Hunter is a freelance electronics engineer and is in Axe's workshop 50 per cent of the time, the rest of the time he takes the work home. Axe are expanding rapidly, and this month sees the opening of a new branch in Ipswich which will be managed by Ashley Dow, another guitarist.

The shop has been running for 3½ years now and the area where they concentrate their energies most, is in giving the customer careful personal attention and a reliable backup service.



Chase Positions

Chase Musicians presently trading under the name of the London Synthesiser Centre — the London Home Organ Centre — the London Guitar Centre and the London Amplifier Centre, are a rapidly expanding company in the musical retail/distribution business. Arising from our continuous growth we now have the following vacancies:

Regional Sales managers Circa £10.000 P.A.

One manager will be responsible for the sales and general administration function of our 3 large shops in central Manchester.

The other manager will be responsible for the sales and general administration function of our new large shop in central Birmingham.

Both managers will be responsible for their sales team and the development of their regional markets.

Applicants must have a proven track record in the musical instrument retail or distributional business.

Departmental Managers

At our new Birmingham shop we require Departmental Managers for each of the following departments:

- (1) Synthesisers/Keyboards
- (2) Guitars/Amplification
- (3) Drums

At our shop in Oldham Street, Manchester, we require a Departmental Manager for the Guitar/Amplification department.

Applicants must have had experience in the music retail business and be able to play the instruments relating to the department they are applying to manage. Service Engineers

We also require Service Engineers to take responsibility for the running of the workshop for repairing and servicing all kinds of electronic musical instruments.

Applicants must have had previous experience.

Please apply in writing, stating age, epxerience, present salary and position applied for to:

Peter Ewart, Project Development Manager, Chase Musicians, 53 Chase Court Gardens, Enfield,

All applicants will be treated strictly in confidence.

Sales Staff

Middx EN2 8DT

At our new Birmingham shop we require Sales Staff for each of the following departments:

- (1) Synthesisers/Keyboards
- (2) Guitars/Amplification
- (3) Drums

Applicants must be able to play the instrument relating to the department with which they wish to become involved.

Oww Guitar Combo £158.00 inc. VAT

- * 60 WATTS OUTPUT
- * FOOT SWITCHABLE PARAMETRIC EQ.
- * PRE & MASTER GAIN CONTROLS
- * PRE-AMP OUTPUT
- * 12" 70 WATT FORMAC DRIVER
- * ONE YEAR UNCONDITIONAL GUARANTEE ON ALL OHM DRIVERS
- * H17" x W201/2" x D9"
- * AT YOUR OHM DEALER NOW

OHM AMPLIFICATION LTD., UNIT 1, KNUTSFORD INDUSTRIAL EST., PARKGATE LANE, KNUTSFORD, CHESHIRE WA168DX TEL: 0565-54641



ONE OF THE NEW EXCITING RANGE OF AMPLIFIERS FROM OHM. MODEL PC60



FD&H MUSIC

138-140 Charing Cross Road, London WC2H 0LD

Telephone: 01-836 4766

■ MUSIC & MUSICAL INSTRUMENTS

LONDON SHERGOLD AGENTS*

Shergold Custom Masquerader£209	Gibson LP custom£455
Shergold Meteor Deluxe£193	Gibson LP deluxe£399
Shergold Masquerader 12 string£231	Gibson E335TD pro£529
Shergold Marathon Bass£231	Gibson LP55£382
Shergold 8 string bass£295	Gibson The SG£299
Shergold double necks from£462	Gibson The Paul£299

+ Fender Strats & Tele's Precision Basses Jazz Bass Musicmaster Bass mustang most colours. As well as a large selection of Kawai - Ibanez Guild - Westbury - Mugen - Yamaha - Rickenbacker - Mighty Mite * Mighty Mite - Dimarzio - Gibson - Accessories

BRASS & WOODWIND

The fabulous range of Yanagasawa saxophones now in stock second hand flutes from £45 + ceramic flutes in G (with tutor book) £19

VERY SPECIAL OFFER LIMITED SUPPLY ELKHART ALL WOOD CLARINET OUTFITS * £150 * Elkhart Ebonite/Wood outfits

* £130 *

Dozens of attractive deals in Olds - Selmer - Armstrong Corton - Benge - Conn - Yamaha Blessing - Getzen - B&H

WHEN ANSWERING TO THIS AD PLEASE QUOTE DEPT IM/FD&H

Complete range brass & woodwind accessories in our showroom

Access - Barclaycard - Credit facilities - Cheques - Cash EVEN?

INSTRUMENTS

124 SHAFTESBURY AVENUE **LONDON W1V 7DJ** Phone: 01-437 2458

VAT Regn. No. 222 5295 82

GIBSONS+GIBSONS+GIBSONS+GIBSONS

Gibson LP Custom + case£455
Gibson LP Deluxe + case£399
Gibson LP Standard + case£425
Gibson LP Firebrand + case£305
Gibson the Paul + case£299
Gibson the SG + case£299
Gibson RD artist + case£528
Gibson ES 335 TD + case£518
Gibson ES 335 Pro + case£530
Gibson ES345 TD stereo + case£610
Gibson RD bass + case£460
ACOUSTICS
Gibson J200 + case£535
Gibson J45 + case£375
Gibson Hummingbird + case£460

EXPORTS!!

ACOUSTIC ELECTRICS
Gibson 175cc + case£568
Gibson 175D + case£530
Gibson Birdland + case£1027
Gibson Super 400 + caseP.O.A.
Gibson Johnny Smith + caseP.O.A.
Gibson L5C + caseP.O.A.
Gibson Howard RobertsP.O.A.
+ all Gibson Accessories

ALL **GIBSONS** LISTED ARE IN STOCK NOW!

Westbury + Wal + Aria etc., etc., etc. WE SPECIALISE IN

+ AMPS BY H/H + Marshall + Zoom Yamaha + Park + Carlsbro + Music Man + Peavey

+ Fender + Ovation + Ibanez + Mugen Rickenbacker + Yamaha + Kawai + Guild

+ DRUMS Tama + Hamma + Maxwin Premier + Sonor + Rogers + Gretsch etc., etc.

Barclay Card + Access + Credit Facilities + we buy Good Gear *

DEALER	CONTACT	WHAT IS THE BEST	HOW DO	WHAT IS	WHAT IS THE BEST
ADDRESS	CONTACT	SELLING ARIA PRODUCT	THEY COMPARE WITH OTHER MANUFAC- TURERS	THE MOST COMMON CRITICISM	SELLING POINT OF ARIA PRODUCTS
Allan Billington 172 Park View. Welling	Phil Archer	T.S.B. Series	Quality very good	None	Visually attractive. Ernomous talking point extreme confidence on dealers part
Potters Music 18 Hill Rise, Richmond, Surrey	Mr Gerry Potter	J.J. Acoustic	Better value	None	Reliability + playability
Soundwave 66 Victoria Rd., Romford, Essex	Phil	S.B. Bass	Very good	None	Value for money
Salop Music Centre Unit One, Town Walls, Shrewsbury	Henry	S.B. Basses	Knock spots of them	None	Workmanship (high standard) Very well made product
Shady Grove Music 14 Church St., Runcorn, Cheshire	Bob Thomas	S.B. Basses	Better in general quality	None	Quality and sound
John Ham 75 Mansel St., Swansea	Gerald	Semi Acoustics and solid	On par with the majority	None	Shackingly low price
Knights, 41 East St., Chichester.	David Clifton	YS 300	The best of copy products	None	Overall finish and comes in set up
Biggles 182 Kings Rd., Bristol	Mr Steve Hogarth	Birdie MX100	The best supplied, service backed up guitars and small amp importers in the UK	Unavailability of SB series Basses	Quality of workmanship at any price
Russell Acott 125 High St., Oxford	Mr G. Ansell	Acoustic Range	Very well	None	Good finish, good playability
Funkshun, 158 Wellingborough Road, Northants	Mr Gary Tyler	SB series Basses	Long way ahead of everyone else	None at all	Incorporate all the features you would expect from a guitar at twice the price
Carlsbro Sound Centre 182-184 Chesterfield Rd., Mansfield	Mr Malcolm Jennings	SB series Basses	Very good	Range slightly confusing	General playability and set up. Value for money
Unisound, 213 Kilburn High Rd., London	Clifford	SB series Basses	Very well	None at all	Extremely good quality for a reasonable price
Dave Simms 1-5 The Grove, Ealing	John Ward	SB 600	Very favourably	None	Finish and set up. Playability
Holiday Music 579 High Rd., Leytonstone	Steve Jolly	SB series range	Very good, better than mos	Very little	Combination of finish, value for money, action
John Kings Music 3 Richmond Rd., Kingston	Mr Graham	SB Bass guitars	Wipe the floor	Too many models	Well set up and their cases
	St. or Carlo				

		MARKETR	REPOR		
DEALER ADDRESS	CONTACT	WHAT IS THE BEST SELLING ARIA PRODUCT	HOW DO THEY COMPARE WITH OTHER MANUFAC- TURERS	WHAT IS THE MOST COMMON CRITICISM	WHAT IS THE BEST SELLING POINT OF ARIA PRODUCTS
Music Market 15 Market St., Kettering	Díck Rabell	SB range of Basses and the PE 1000	Very favourably	No adverse criticism	Width of range and exceptional value for money
Wishers, 77 Osmanston Rd., Derby	Mark Hopkins	SB 1000 Bass	Extremely well	Some buyers disapprove of the appearance of neck/body join	Price is number one, general appearance when delivered
ABC Music 14-16 High St., Addlestone	Kim Josephs	SB 1000	Very well indeed, best value for money	Hard to find criticism	Well constructed, good value for money
Mary's Music, 40-42 Whalley St., Accrington	Mr Mortimer	PE460	Very well, quality and price	Machine heads take a little understanding	Quality and price
Charles Taphouse, 10-11 Parsons St., Banbury	Richard Taphouse — Glen Derges	SB1000 Bass + LC 440	Best Japanese manufacturer	None	Quality for money
Yardleys, 89 Old Snow Hill, Birmingham	Rod Stevens	Guitars	Very good value for money	Lack of supply	Well made, reasonably priced
Music Stores 18 Caunce St., Blackpool.	Mr O'Dea	All under £250	The best	None	Value for money
Knights, 41 East St., Chichester	David Clifton	Basses	More popular with customers	None	Good standard, complete spectrum of market
Croydon Music Studios 40 Station Rd., W. Croydon	Mr Hersey	Bass guitars	Better value for money	None	The name. Guitar already set up
Dick Middleton Music 51 Quarry St., Guildford	Dick Middleton	Basses SB range	Very favourably price and quality		Good finish
Bedford Musical Industries 58 Midland Road, Bedford	Lyndon Norman	90 per cent are good	Far superior	None	Price and quality
Soundwave Music Centre 51 Gwent Square, Cumbran	Mrs James	Semi Acoustics	Very good only guitars already set up	None	Quality for price
Abbey Music 5-6 Market Place, Burton-on-Trent,	Terry Hale	Guitars	Better than most	None	Value for money
Kingfisher Music 20 Kings Rg Fleet	Kathy Fisher	Bass Guitars	Compare favourable with guitars three times the price	None	Quality, value for money
3116			9 B		

Woodroffe's

5-8A DALE END, BIRMINGHAM B4 7LN Telephone: (021) 236 4992/3

GUITARS & THINGS

Gibson Dove flying out at £375.00 Gibson Marauder, one only at £180.00 Gibson Flying V unrepeatable at £355.00 Gibson 25/50 Les Paul £440.00 All Gibsons include cases.

All Gibsons include cases.

Guild acoustics at discount prices.

D25 only £195.00 D35 only £225.00 G37 Blonde £265.00

Roland
Roland 201 Echo £299.00
Roland 301 Echo £455.00
Roland CE1 Chorus £125.00
Boss Tu120 guitar tuners £69.00

Echoplexes
Intermusic reverb combo

Birmingham Synthesiser Centre

Reduced prices on our reduced prices:
Wasp Synth £169.00
Yamaha CS5 £199.00
Yamaha CS10 £249.00
Roland Vocoder plus £799.00
Roland Jupiter 4 £1164.00
Roland pro mars £666.00

Over 100 keyboards on display at Birmingham's ultimate keyboards centre.

JACQUES PLUGGS

119 JOHN BRIGHT STREET BIRMINGHAM

Telephone: (021) 643 7909

Second hand PA equipment, Cerwin Vega, JBL, Altec, etc. Electric guitars and amps.

Stock changes daily, please phone for up-to-date prices



£199.00

£220.00

16 Mersea Road Colchester Essex (0206)65652



41/43 St Nicholas St Ipswich Suffolk (0473)54996

BLASTINTO THE '80s MODEL 1 BOOSTER Guitar Guitar

In 1948 the first production solid body electric guitar hit the market. It revolutionized the music industry and the sound of music for years to come. Rightly so, but what about 32 years later? Over 99% of the guitars made today have the same old passive electronics that those of 1948 did. The difference between today and 1948 is that there's something you can do about it. Power Pots offers a line of on board active electronics that make your guitar an instrument of the 80s. With the addition of a Power Pots booster, you'll get low impedance output (which allows use of up to 150 feet of card), revitalized highs (eliminates interaction of cord, as a capacitor, with pick ups), boosted output (effects work better and amps sound better), and uncompromising circuit design which utilizes the latest in C technics to insure flow battery consumption and low noise levels Power Pots products come with everything needed for installation, including wiring diagrams and a live year warranty. So contact your local music stores and ask for Power Pots by name — or sent



ON BOARD ELECTRONICS FOR TODAY'S GUITARIST P.D. Box 895, West Covins, California 91793, U.S.A. (213) 339-8489 Dealer Inquiries Welcome.



A superb new 24-track studio has now opened in North Wales.
MCl 24-8-2-track tape machines with Dolby: Cadac console; Tannoy

Buckingham monitors; H/H Mos-Fet amps; Eventide, Lexicon, UREI, Audio and Design, Rebis, and Orban auxiliaries, EMT plate, Kawaii Grand Paino, Hammond organ, ARP synthesizer, Rogers drums. Full air-conditioning. Room for 60 musicians. Spacious control room.

Look out for full feature in June's "International Musician".

£30 per hour, discount for block bookings and night working.

Accommodation easily arranged.

CALL US!

SAIN, Penygroes, Caernarfon, Gwynedd. Tel: Penygroes (028 681) 732



Why be satisfied with less than the best?

THE PITCHMETER

has no equal for easy, instantaneous and fully accurate tuning of all types of guitar — including bridge adjustment

"easy and simple to use ..."

"more accurate than any tuning divice I know ..."

"almost essential to any recording studio that wants to have musicians playing in tune ..."

"invaluable when checking guitar intonation and accuracy of fretting ..."

Chris Rogers in IMRW

£295 + VAT from CLAVITUNE Ltd 24 Adelaide Square, Windsor, Berks. Tel. 63180 Lake Audio Consultants

PROFESSIONAL EQUIPMENT MAIL ORDER AND EXPORT AKG Allen & Heath Ampex Ashley Brenett DBX JBL MM MXR Quad Revox Shure Soundcraft Tannoy Teac/Tascam etc

Send a S.A.E. for our new mail order catalogue: Lake Audio Consultants 11 Beauchamp Gardens Rickmansworth Hertfordshire WD3 2EF

Phone: 092 37 70488

Dick Middleton Music 51 Quarry Street Guildford Surrey

Appointed Agents for

SCHECTER GUITAR RESEARCH

We guarantee a full stock of all Schecter guitar parts. Along with expert advice and consultation for the serious guitarist who wants to build a guitar to fit his individual musical needs.

Tel: Guildford 34537

SELECT THE IDEAL GUITAR PICK FOR YOUR INDIVIDUAL STYLE . . .



FOR PRICE LIST AND SAMPLE
OF 50 DIFFERENT PICKS
INCLUDING HARD TO FIND
STYLES, COLORS, XTRA HEAVY
& NYLON PICKS,

SEND \$7.00 (USA DOLLARS)
OR (CHECK ON USA BANK) TO:

SOUND & STAGE INC. • P.O. BOX 34 • PICKS FANWOOD, N.J. 07023 U.S.A.

AUDIO CONSULTANT ENGINEERING

BEVERLEY STUDIO

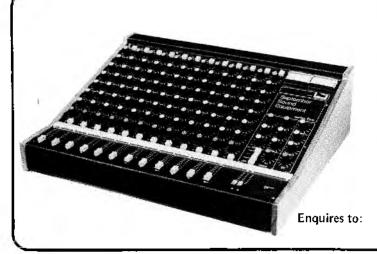
2,000 sq. ft. of rehearsal space. Facilities include backline hire. Free refreshments, Games room and storage space. 1Kw P.A. supplied. inc. 12/4 mixer, wedges and side fills. Rates P.O.A.

134A Stoke Newington Church Street London N.16 Tel: 249 0018 ACE P.A. SALES
Large stocks of new and
used equipment. Amps by
R.S.D., B.G.W., Phase Linear
etc. Speakers by J.B.L.,
A.T.C., Gauss etc. New and
used Woodwork, complete
P.A.s built to spec. Sure
mics. at best prices in
London. Full repairs and
customising service including American
amplifiers, most speakers
reconed on our premises.

KILLERWATTS P.A. HIRE

Rigs available from 3K upwards. We offer world-wide full touring service including P.A., Lighting, Backline Hire, Transportation of equipment, crews and group personnel. Top quality equipment includes Soundcraft, Eastmill, J.B.L., A.T.C., Electrovoice.

493A Green Lanes, Harringay N.4 Tel: 340 7102



September Sound Equipment SERIES FIVE mixing consoles

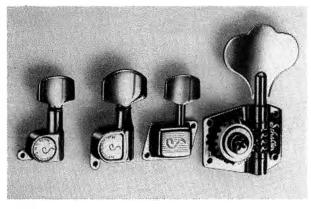
Studio Standard specifications'
Balanced low and high impedence inputs
4 Band Equalisation with 30dB range
Seperate 2 Band Equalisation on master outputs
Latching PFL fitted as standard
Comprehensive 4 way monitoring and metering
Very attractive appearance and rugged construction.

The Old Orchard, Antrobus, Northwich, Cheshire Tel, 0606 891 033

machine heads

How can you tell a high-quality machine head? Look at what brand machine head the leading guitar manufacturers are using on their top line guitars. We're sure you will find that Schaller makes them.

The Schaller reputation has been built on creative engineering, closer tolerance, care in handling, better buffing, and a high-quality chrome finish that is a good reflection of our name.



Schaller Electronic Pfinzingstrasse 2, 8501 Feucht, West Germany



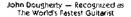
TEL: (0939) 290 574

In as little as one evening... PLAY FASTER, CLEANER AND EASIER WITH THE MIN'D PICK.

Use the incredible stone pick. You'll notice the difference immediately. It's larger and heavier than the common pick. And for a good reason —

This larger pick gives you greater control. It feels different but in one evening's play you'll be amazed at how it can actually improve your sound and technique. You'll play better . fuller, richer chords . . brighter cleaner lines . more power... greater vesatility ... increased speed.

> The MIN'D PICK won't wear out — ever.





Available now at leading music stores. Just ask for the MIN'D PICK.

> Created and distributed by Dougherty-Miller, Inc., 1219 Glenside Ave., Wilmington, Delaware 19803

15 Market Street Kettering

MUSIC MARKET

Phone Kettering 518742 for the widest range of Tria products



PETE'S GUITARS

VINTAGE GUITARS, BANJOS. MANDOLINS

1756 University Ave. St. Paul, Minn. 55104

612 647-0053



BIGGLES SUMMER MADNESS

For one month only, every item purchased over £300, entitles buyers to £35.00 worth of goods, this also applies to discount lines!

Main dealers for Aria, JBL, RCF, RSD, Burman, Vitavox, MXR, ATC, Celestion, Peavey, Fender, Gibson, Wal and stacks of S/H

Aria Discontinued Lines

PE110 £135.00; LS450 £155.00; PE450 £185.00; PB500 £190.00; JB550 £172.00.

Ex Demo Amps — Knockdown Prices

Burman Pro 2000 £475.00; Burman 501 £345.00; Music Man 112 65 Rev £370.00; Ampeg HDV 4 Rev £345.00; Main Combos and Amps, 30% off Retail Price.

DiMarzio Special
P. Bass £16.95; PAF £16.95; D Sound £16.95; S. Dist £16.95; SDSI £16.95 and more. Please phone for a haggle over further quantity discount!

ACCESS & BARCLAYCARD, PHONE NOW FOR IMMEDIATE DESPATCH: Tel: (0272) 552147/555319

IMPORTANT NOTICE

New opening hours: Specially for the gigging muso. (Really, it's so Steve can have a lie-in.) Monday — Closed. Tues-Fri. 12a.m.-8p.m. Sat — 10.30a.m.-5.30p.m.

BIG MU BRISTOL (0272) 552147

BIG MU READING (0374) 584945

555319

85 West Street, Old Market, Bristol

Allens



PROBABLY THE LARGEST SELECTION IN EAST ANGLIA OF:

PEAVEY BURMAN

PREMIER GIBSON YAMAHA MUSIC MAN WURLITZER PIANO OVATION RHODAS A.D.D.

SHURE AKG BEYER

Fast efficient repair service on amplification etc John Birch Guitarmaker eveilable for Guitar Refrets, Repairs, etc."

> 22 BROAD ROW GT. YARMOUTH

LARGE SELECTION OF SHEET MUSIC, BOOKS, ETC



remie

Percussions accordées et batteries de tambours pourront être obtenues à l'address suivante.

Chas. E. Foote Ltd., 17 Golden Square, London W.1. Tel. 01-437 1811.



ASSEMBLY MUSIC. 25 Claverton Buildings, Widcombe, Bath. 0225 22894 0.25.2504 EC. IR, MA. RS. Spec. ERS. EK. G.A.D.B.W. H.Ac.Sfi,PA.PSG. S/hand. M.RC.C.B. Premier, Traynor, Sonor, Carlsbro, Gib-

son. Tama.

BEDFORSHIRE MR MUSIC 90/92 Bromham Road, Bedford. Bedford 50861/2 A.EC.O.IR.SYN.G.D.S. S/Hnd.RS.K.

ERS.EK.B.W.L.H.Ac.SFI.SM.PA. PSG.CB.Di.

BIRMINGHAM MICHAEL PECK-THE SHEET MUSIC SPECIALISTS 1478 Pershore Road, Stirchley, Birmingham B30.

ingham 830. Tel: 021 458 6460 K.Ek. Syn. RD.S.ERS. S/Hnd.A.G.S. (Gibson, Rotosound Spec.,) T.(D.K.G.)Ac. SM.PA.

YARDLEYS Snow Hill, Birmingham. 21 Colmore Row, Birmingham B3 021 236 7441 G.A.D.B.W.S. Di.P. RS. Ma: Aria; H.H.,Sonor, Ludwig, Premier.

JONES & CROSSLAND LTD. Smallbrook, Queensway, Birm-021 643 4655/6/7. CB.RCn.O.IR.Syn.G.A.D.S. S / H n d . RS.ERS.EK.B.W.Ac.M.SM.PA.

BIGGLES MUSIC 85 West Street, Old Market, Bristol. 0272 552147 A. G. S. RCn.IR. S/Hnd.MA. RS. ERS. EK. M. PA. Cb. T. HP & PX.

BROWNS OF BRISTOL 5 Union Street, Bristol. 0272 23646 Wem Copycat EC. RC. IR. G. AIMA Custom Sound) D (Premier MA). S. S/Hnd. RS. ERS. B (MA Conn). W. SFI (Mandolins), bouzoukies), M, PA,

BUCKINGHAMSHIRE YEOMAN MUSIC, 33 Cambridge Road, Aylesbury, Bucks, 0296 85549 O. main agents for Thomas, Wellson, Viscount, National Panasonic, Syn. G.A. D. S. S/Hnd. MA. RS. ERS. K. B. W. T. SM.

CAMBRIDGE CAMBRIDGE ROCK 44 Newnham Road, Cambridge. D223 65093 EC. RCn. IR. G.A.S. S/Hnd. MA. RS. ERS. H.M. RC. PA + CBPA.

CHESHIRE CUSTOM AMPLIFICATION 45 Nantwich Road, Crewe 0270 4779 46 Hope Street, Hanley Stoke-on-Trent (0782) 266897 G. A. D. K.S. Di.L.

COVENTRY MUSIC CENTRE 3-4 Whitefriars St., Coventry. 3-4 Whitemers St., Covertey. 0203 58571 (EC. RCn. O.) Syn, G. A. D. S. S/Hnd. MA. RS. Spec. Ers. EK. K. B. L. H. T. M. RC. SM. PA. CB. Di.

CUMBRIA CUMBRIA
J.P. DIAS (CARLISLE) LTD.
149-153 Botchergate, Carlisle.
0228 22369/28700
EC. O. Syn. G. A. D. K. B. W. S. Di Ac.
PA. RS. ERS. EK. T. M. S. M. P. Ma:
Hammond, Boosey & Hawkes, Premier,
H.H., Farfisa, Gibson.

NORTHERN SOUNDS 113 Duke Street, Barrow in Furness. 0229 27100 41 Jane Street, Workington. 0900 4797

15 Botchergate, Carlisle. 0228 39945 EC. RCn. D. Syn. G. A. D. S. S/Hnd. MA. RS. Spec. EPS. EK. K. L. SFI, T. M. RC. SM. PA. CD. Di.

WISHER (DERBY) LTD. 77-79 Osmaston Road, Derby EC. RC. IR. Syn. G. A. D. S. S/Hnd. RCN, KBWL, RC. PA. Di. Main Agents: Premier, HH, Carlsbro, Peavey, Ampeg, Custom sound, Musicman, Yamaha, Gibson, Fender, Sfingerland, Tama, Pearl, Ludwig.

DORSET

DERRYSHIRE

COAST MUSIC

296 Charminster Road Bournemouth Dorset 0202 522613 Spec American Guitars G.A.D.S.MA.RS.M.PA.CB.Ek.S/hnd.

THE GIG SHOP (Micro-Music) 802b Christchurch Road, Boscombe, **Bournemouth** (0202) 302460 Dorset Peavey Soundhouse G. A. D. S. S/Hand, MA, RS, RCN, M. PA, CB.

HAMPSHIRE BECKETTS MUSIC 2/3 Gibbs Rd., (Beside ABC Cinema) Southampton 0703 24827

C. A. D. S. S/Hnd, R. S. B. W. AC. M. SM.

Kinglisher MALC Cempuny
20 Kings Rd.,
Hampshire Fleet St.,
02514 21210 G. A. EK. P.A. S/Hnd. EC. CB. O. RC. SM. P. RS. ERS. SFI. E. Fender, Soundhouse, Gibson, Star Dealer Syn. IR. M. A. S. L. H. PSG. M. P. CB.

Telecomms, 189, North End, Portsmouth (0705) 60036 EC. RCN, IR. SYN, G. A. D. S. S/Hnd. RS. K. L. H. M. Rc. SM, DA. Di. Ma: H.H., Fender, Ludwig.

BUZZ MUSIC 65 Widemarsh St., Hereford, 0432 55961 0432 55961 EC. RCn. IR. Ryn. G. A. D. S. S/Hnd. RS. ERS. EK. L. H. M. RC. PA. CD. Pearl, RSD. MM Ludwig, Gretsch, Roland, Gibson, Fender and everything else worth having!!

HERTFORDSHIRE MR MUSIC 24 Bridge St., Hemelhempstead. Tel: (0442) 61812 A. EC. O. IR. SYN. G. D. S. S/Hnd. RS. K. ERS. EK. B. W. L. H. Ac. SFI. SM. PA. PSG. CB. Di.

HUMBERSIDE

HEREFÖRD

JOHHNY PAT'S MUSIC PLACE
118 Holderness Road,
Hull HUS 2EA
Hull 23702
News + S/H Group Gear Plus
Repair Service - Discos

NORTHERN IRELAND

CRYMBLES (IRELAND) 67-71 Dublin Street, Belfast 0232 26818 G. A. D. K. B. W. S. Di. Ac. RS. SM.

MODERN MUSIC CENTRES Wright's Arcade, Newtonwards, Tel: (0247) 814657 and at: Ards Shopping Centre, Newtownards. Tel: (0247) 817965 EC. IR. SYN. G. A. D. S. S/Hnd. RS. ERS. B. W. L. Ac. T. M. R. C. SM. PA. PSG. CB. Di.

SESSION MUSIC (Sports and Music Ni Ltd) 73-75 Broughshane Street, Ballymena 73-75 Broughsmane Street, Ballymer 0266 41792 81-93 York Street, Belfast 0232 38502 Session Music, 169 Spencer Road, Londonerry 0504 46796 G. A. D.K. PA. S. PSG. M. ERS. Ma: Gibson, Moog, H.H. Carlsbro, J. B. L., Citronic, W. Ac. T.

KENT MOSS MUSIC LTD. 67 Canterbury St., Gillingham. Medway (0634) 576381 G. A. D. S. RS. ERS. PA. B. W. T. M. Di. Ma: Carlsbro, Dean, Markley, Peavey, Shergold, Project.

KENNARDS

85-86 Morthgase Centerbury Kent 0227-60331 6C O IR Syn G A D S Hnd R\$ Spec ERS EK K BW L H.Ac T M RC SM PA D 24 hoer deswer phone service

Kennards

W New Pant Ashlord Kent 0233 23226 O Syn G A O S S Hard EK K B W T M SM PA

LANCASHIRE BARRATTS DARRATIS
1 Meadow Street, Preston
0772 55628
IR. SYN. RS. ERS. EK. G. A. D. B. W.
S. Di, L. H. PA. M. P.



HW AUDIO 174 St Georges Rd., Bolton BL2 1BA 0204 385 199 EC. RCN. S/Hnd. RS. ERS. L. H. M. Rc. SM. PA. CB. Di. Ma: AKG. JBL.

LEEDS SCHEERERS 8 Merrian Centre, Leeds 2 0532 449592 G. EC. A. WB. S. D. ERS. RS. HH Agents. IR. S/Hnd. M. PA.

LEICESTERSHIRE

GETA GREAT DEAL AT



Head Office: 18 The Rushes, Derby Road, Loughborough, Leics. Tel: Loughborough (0509) 218020

THE SOUND PAD MUSIC CENTRE 64 London Road, Leicester. 0533 555202/21041 EC. RCn, SYN, G, A. D. S. S/Hnd. MA. ERS. EK. L. M. Di.

CENTRAL MUSIC LTD. 12 New Bond Street, Leicester. Tel: 538681

THE DRUMMERS DRUM SHOP Main agents for: Premier, Sonor, Gretsch, Rogers, Pearl and Latin Per-cussion. Avedis Zildjian and Paiste Cymbal Centre. Many other brands of drums and cymbals in stock. Repair ser-

CUSACK'S MUSIC 33 Braunstone Gate. Leicester. 0533 548517 CB. P.A. G. A. ERS. DI. H.

SOUND PAD

Music Centre Ltd.

64, London Road, Leicester. Phone: Liecester (05533) 20760 21041

Yahama, Orange, Custom Sound, Pearl, Maine, Music Man, Martin Guitars, M/M, H/H, Roland, Ibanez, Kramer, Hagstrom, Citronic, Sound-Out, Ice, Optikinetics, wurlitzer, Tama, Altec, Cloud, Pulsar, Fender, Rogers, Rhodes, Rickenbacker, Peavey, Marshall, Premier, Electro Harmonicx, Wenn, Carlsboro, Ludwig, Paiste, Zildjian, Bayer, Shure, MXR, Zyn, Crut, Kramer, Arp, Moog, AKG, Color Sound, Fal, Korg, Vox, Remo, Ampeg.

LOUGHBOROUGH MUSIC CENTRE 18 The Rushes, Loughborough, Leicester Ec. O. IR. SYN. G. A. D. S. S/Hnd. Ma. RS. ERS. EK. K. B. W. L. H. Ac. T. M. SM. Di.

SUPERMOUSE MUSIC 233 Melton Road, Leicester. 0533 63830 IR. SYN. G. A. D. S. S/Hnd. MA. RS. Spec. ERS. EK. K. B. L. H. T. M. RC. SM. PA. CB. Di.

LONDON

CITY OF LONDON MUSIC STORE, 17 Eldon Street, E.C.2. 17 Eldon Street, E.C.2. (75 yards Liverpool St. Station) 01 588-4649 EC. SYN. G. A. D. S. S/Hnd. B. W. Ac. SFI. PSG. RS. ERS. M. SM. (Albums). PA.

FO & H MUSIC 138-140 Charing Cross Road, London WC2H OLD Tel: 01 836 4766 EC. Syn. G. A. S. S/Hnd. MA. (HH, Maine, Ibanez, Peavey, Music Man, Guild, Gibson, Electroharmonix), RS. Spec, ERS, EK, K.B. W. SFI, T. M. RC. SM. PA. PSG. Di.

STEPHEN DELFT 242 Cable Street, E1 01 790 7028 G. A. SFI, CB. 24 Hrs. RS.

F & H PERCUSSION LTD. 131 Wapping High Street, London E1 01 481 3704 01 488 3530 Percussion Hire and Repair Specialist. Also amplification and instrument hire.

GRANGEWOOD ORGANS (JRO) 445/7 High Street, North, Manor Park, London E12

COI 472-5107/4690 EC. SYN. D. S. S/Hnd. MA. RS. ERS. EK. K. L. T. M. PA. Di. Spec. A. O. G.



CHASE CENTRE

22 Chalton Street, Landon NW I 01 387 7449

EC.O.IR Syn.G. A.S/nnd MA HS Spec.Syn. ERS.EK, K.H.T.M. RC.PA CB

GIGSOUNDS LTD (01) 769 5681 Ludwig Centre, Music 'All

85 + 104 Mitcham Lane, Streatham, SW16 EC. SYN. G. A.D. S. S/Hnd. MA. ERS. EK. H. M. RC. SM. PA. CD. Main Agents Marshall, Peavey, Kramer, Ova-

MAURICE PLACQUET 358-360 Uxbridge Rd., Shepherds Bush. London W12. 01 749 1204/0859 G. A. D. B. W. S. Ac, PA. RS, P.

MAURICE PLACQUET HIRE 69 Jeddo Road, Shepherds & Bush.

NORTH LONDON ORGAN STUDIO, (North London Group Gear) 809-811 High Road, Tottenham, N.17, 01 808 0388 EC. RCn, O, SYN, G. A. D. S. S/Hnd, MA, RS, EK, T. M. SM, PA, PSG, Di.

PERCUSSION SERVICES, 289-299 Borough High Street, SE1. 01 407 4952

The Percussion Centre of Europe Percussion Importers and Distributors. Percussion Manufacturers. Sales and

PERCUSSION SERVICES. 289-299 Borough High Street, SE1, 01 407 4952, 403 1056 The Percussion Centre of Europe.
Percussion Importers and Distributors. Percussion Manufacturers, Sales and

Hirng. IR. D. S/Hnd. MA. RS. Spec. T. SM. C.D. Main Agents for Remo, Ludwig, Premier, Sonor, Duraline heads, Chain-drive pedals. Custom sticks.

PERCUSSION SERVICES, 17-23 Vals Royal, off Yorkway, Kings Cross, N7. IR. D. S/Hnd. MA. RS. Spec. T. SM. CD. Main Agents for Remo, Ludwig, Persites Consequations Premier Custom sticks

DAVE SIMMS MUSIC CENTRE 1-5 The Grove, Ealing W5. 01 560 0520 Spec. G. A. PA. S/Hnd. Di. L. D.

ROSE-MORRIS (RETAIL) LTD. 81-83 Shaftsbury Avenue, London W1 EC. O. SYN. G. A.D. S. S/Hnd. RS ERS. EK. K. B. W. SFI. M. PA. PSG.

PERCUSSION SOUNDS 405 David Walk, David Lane, Basford, Nottingham.

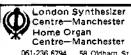
Nottingnam. 0602 701054 D. S/Hnd. MA. RS. Spec, T. RC. Main agents for Premier, Slingerland, Lud-wig, Yamaha, Sonor and Paiste.

MANCHESTER

BARRATTS IR. SYN. RS. ERS. EK. G. A. D. B. W. S. Di. L. H. PA. MP. Ma; King, Getzen, Benge, Marigaux, DeFord.

8a Oxford Street, Manchester M15 QA 061 236 0542 IR. RS. B. W. H. SM.

BARRATTS 72-74 Oxford Street, Manchester 061 236 0052 IR. SYN. RS. ERS. EK. G. A. D. B. W. S. Di. L. H. PA. M. D. Mat King, Gatzen, Benge, Marigaux, DeFord,



061-236 6794 58 Oldham St., Off Piccadilly Manchester

NORFOLK

NORWICH SOUND SYSTEMS 80 Prince of Wales Road, Norwich Norwich 61 1989 H. E. RS. RS. S/Hnd. S. D. A. G. SYN. EC. Di. AC. PA. M. Ma: Traynor, Pearl, Gibson, Star Dealer, Yamaha and Disco Sound (in MA), Carlbro, Custom Sound, Fender, Haze,



HARDY-SMITH MUSIC CENTRE, 2, A. Outram St., Sutton in Ashfield. Tel: Mansfield 56242 EC. O. SYN. G. A. D. S. S/Hnd. Rs. K. B. W. Ac. SFi. T. M. SM. PA. Di. Ma: Farfisa, Premier, Boosey & Hawkes, Korg. Kora.

NOTTINGHAMSHIRE

CLEMENTS PIANOS LTD. 21-23 Derby Road, Nottingham 0602 47912 G. A. D. P. B. W. S. SM. RS.

PERCUSSION SOUNDS 405 David Walk, David Lane, Basford, 0602 701054 D. S/Hnd. MA. RS. Spec. T. RC. Main Agents for Premier, Slingerland, Lud-wig, Yamaha, Sonor and Paiste.

PERCUSSION SOUNDS 405 David Walk, David Lane, Basford Nottingham. 0602 701054 0602 701054 D. S/Hnd. MA. RS. Spec. T. RC. Main Agents for Premier, Slingerland, Ludwig, Yamaha, Sonor and Paiste.

SCOTLAND

SHRÖPSHIRE

BRADLEYS MUSIC LTD. 69a West Regent St., Glasgow. 041 332 1830 EC. RCN. MA. RS. Spec. G. A. D. B. S. PA. S/Hnd. T. M. P.

C.B. MILLER & CO. LTD. Queensgate Arcade, Inverness, G. A. D. S. EC. O. IR. S/Hnd. RS. ERS. EK. K. B. W. Di. M. T. Ac.

TELFORD MUSICAL 7 Bell Street, Wellington, Telford, Shropshire. 0952 55310 GOZ 55310

RC. O. SYN. G. A. D. S. S/Hnd. MA. Yamaha, Gibson, Elgan, Boosey & Hawkes, RS. ERS. EK. K. B. W. H. Ac. SFI. M. RC. SM. CO.

STAFFORDSHIRE LANGDONS ELECTRIC MUSIC 27 Victoria Street, Wolverhampton. 0902 27251

GOVERNMENT OF STREET amplification.

SUFFOLK MORLINGS LTD. MOHEINGS LTD.
House of Music,
149-151 London Road North,
Lowestoft, Suffolk.
Lowestoft, 65491-713143
EC. O. IR. SYN. G. D. S. S/Hnd. Ma:
Aria, Premier, maine, Kawai, RS. ERS.
K. B. W. L. H. AC. SFI. SM, P. SG. Di.

ANDERTONS SUPERSTORES, 5 Stokefields, Guildford, Surrey (Group 0483 38212 - 73b North Street, Guildford (Classical).

ABC MUSIC 14/16 High Street, Addlestone, Surrey 0932 40139/54897 96 High Street, Esher. 78 66195 78 65195 EC. RCn. O. IR. Syn. G. A. D. S. S/Hnd. MA. RS. Spec. ERS. EK. K. B. W. L. H. Ac. SFI. T. M. RC. SM. PA. PSG. CB. Di. 56 Surbiton Rd, Kingston (01) 546 9877 Spec. Di (L. & AMP).

CROYDON MUSIC STUDIOS 40 Station Road, West Croydon, Sur-G. A. D. S. S/Hnd. RS. B. W. Ac. SFI. M. SM. MA. (Premier, MXR).

John King's

8 Richmond Road, Kingston O. IR. SYN. G. A. D. S. S/Hnd. MA (HH) RS. Spec. EK. B. W. L. H. Ac. T. M. RC. PA. Di.

SUSSEX

CASS MUSIC 29 South Street, Eastbourne, East Sussex. 0323 37273 ER, Ren. G. A. D. S. S/Hnd. MA, RS. Spec. ERS. EK, K. B. W. SFI, T. M. RC. PA. PSG. CD.

Southern Music

0273 733387/774536 EC. RCn. IR. Syn. G. A. S. S/Hnd. MA. RS. Spec; (G.A.) ERS. EK. L. H. SFI. M. RC. PA. CB. Di.

TYNE AND WEAR MUSIC MAKER 30 Dean Road, Westoe, South Shields. 50 Dean Hoad, Westoe, South Shields. 0632 561349 EC. RCn. G. IR, SYN. G. A. D. S. S/Hnd. MA. RS. Spec. ERS. EK. K. B. W. L. H. AC. SFI. M. RC. SM. PA. C.B. Giannini, ATC.

WHITE SOUND 3 Albion Place, Sunderland, Tyne & Wear Tel: 0783 78058

Tel: 0783 78058
EC. RCN. SYN. G. AD. S. S/Hnd. RS. ERS. EK. K. L. H. SFI. M. RC. PA. PSG. Di. Main Agents for Allen Steath, HH, MM, Vitavox, Peavey, Roland, Mega, Boss, Washburn, Kramer, Maine, Haze. Specializes: Carlbro, Rickenbacker, Ibenez, Fender. Gibson, Tama, Ludwig, Premier, ATC, JBL & Gauss.

WALES MUSIC CENTRE ABERDARE 13c Canon Street, Aberdare, Mid. Glamorgan. Aberdare 874141 O. G. A. RS. S. SM. M. K. SYN. ERS.

PETER NOBLE LTD. 11 Station Road, Lianishen, Cardiff. EC. SYN. G. K. B. D. P. W. S. Di. L. S/Hnd. M. Spec. PA. ERS. Moog, Yamaha and Pearl pro centre.

SOUNDWAVE MUSIC CENTRE

51 Gwent Square, Cwmbran, Gwent, VValue 500 (06333 2501)
SFI, TM, RC, SM, PA, CB, Di, EC, O, IR, SYN, G, A,D, S, S/Hnd, RS, ERS, EK, B, H, Ac, MA, EC, RCN, PSG, CB, Music man, Gibson, Star Dealer, John

SOUNDWAVE MUSIC CENTRE 51 Gwent Square, Cwmbran, Gwent, okadas, 2501 SFI, T. M. RC. SM. PA. CB. Di. EC. O. IR. SYN. G. A. D. S. S/Hnd. RS. ERS. EK. B. H. Ac. MA. Music Man, Gibson, Star Dealer, John Birch.

BERT VEALE (MUSICAL) LTD. 8 New St., Neath, Glam. Neath 2825 EC. RCN, O. SYN. MA. RS. MA. RS. Spac. EK. G. A. D. K. B. W. S. Di. L. Ac. SFI. PA. PSG. S/Hnd. T. M. SM. P. Peavay, Carlsbro, Custom Sound, laney, Fender, Gibson, Kawai, Galanti, Premier, Olympic, Beverley, Pearl, Tappa Tama.

WARWICKSHIRE

CENTERSOUND 5 Albert Street, Rugby, Warwickshire. 0788 74566 0789 74566 RCn. O. IR. SYN. G. A. D. S. S/Hnd. MA. RS. ERS. EK. L. H. M. RC. SM. PA. Di.

S.A. RENTON LIMITED 25 High Street, Learnington Spa, Warwickshire. Tel: Learnington 26703
G. A. S. S/Hnd. RS. W. SFI. M. SM. Early Hand made Inst.

WORCESTERSHIRE

WORCESTER MUSIC CENTRE 3-5 Bull Entry, Worcester. Worcester (0905) 20279 Worcester (1996) 202/9 EC. O. G. A. D. S. S/Hnd. MA. Fender, Gibson, Premier, Yarnaha, RS. Spec. ERS. EK. K. L. H. T. M. SM. PA. Di. RCN, Syn. Custom Sound, Baldwin.

ROCK SHOP 201-203, Stourbridge Rd., Holly Hall, 201-203, Stourbridge Rd., Holly Hall, Dudley. Tel: (0384) 74700 EC. G. A. Dr. STR. S/Hnd. Ma: Aria, Marshall, Carlsbro, Fender, Gibson, Star Dealer, Lab, Premier, Park, Roset-ti, Antoria, EMI Music, ERS (BR. W. Ac. Toorder) SFI, T. M. RC. PA.

YORKSHIRE

JIGSAW SOUND CENTRE 2 Station Road Ossett, W. Yorks (0924) 277981 Fender, Gibson, Vox, Carlbro, Music-man, WEM, Custom, Pearl, Rogers, Area agents for MM equipment.

THE ORGAN CENTRE 4b + 4c Commercial Street, Harrogate, Yorks. RCn. O. IR. SYN. G. A. D. S. S/Hnd. MA. RS. Spec. ERS. EK. K. B. W. L. H. AC. T. M. RC. SM. PA. PSG. CB.

Birmingham B15 2UJ 021 455 0645 8T £15 p/h (10am - 10pm after 10pm and Sundays £20 p/h), Cap 35, tf, R:R-R-C. R-Cr. d-t. CP. KafBechstein, Chappell babygrand), DC, OTC, M, S, SM, ha

KEY FOR DEALER GUIDE EX Electric Kayboards K Keyboards Echo Chambar Brass RCn Re-Caning O Lighting Hire Organs İR Instrument Rental Synthesizers SYN Accordions Ac SFI G Guitara Special Fretted Inst. Tuition Amplifiers T M Ĝ Drums Mikes RC SM S \$/Hnd. Strings Sheet Music Second Hand MA RS PA PSG Public Address Main Agents Pedal Steel Guitars Repair Service Custom Building Specialists
Electronic Repairs

OSTUDIO GUIDEO

BEDFORDSHIRE QUEST STUDIO

721 Windmill Road, Luton, Bedfordshire.

shire.
Tel: (0582) 414297
16T. Cap 8, from £100 p/d. D. tf. R-R. CP, R-C, Dc, Ba, d-t, Piano, M. S. Ac. ba. SM. Eventide effects. Master room, stereo reverb Klark-Teknik Graphics, Audio and Design, Compressor Limitare. Limiters.

BERKSHIRE STARTLING STUDIOS

Pitten Hurst Part; London Ad., Sunn-Tel: Ascot; 21184

BIRMINGHAM

ZELLA RECORDING STUDIOS Walker Hall, Ampton Road, Edgbaston.

BRISTOL

The Providence Meeting Room 145 Whitehall Road, Whitehall, Bristol (0272) 552213 10272) 552213
16T Cap.20, D. TF, R-R. 1St, CP, Ka, R-C, Mix, DC, d-t, M, S, ba, SM, Individual Quotes, Yamaha Electric and Acoustic Grands, Synth CS80 available. MUSHROOM STUDIOS 18 West Mall, Clifton, Bristol 0272 35994

8T £10.50 p/h Cap 17. R-R-C-Cr CP DBXD Ka Disc Pressing, Accommodation 6 bedrooms, self catering.

SOUND CONCEPTION 85 Ashley Road, Montpelier, Bristol 6 0272 554721 8T £10 p/h, £85 p/d, Cap 10, tf, R-R-R-C, d-t, CP, Ka (Bechstein Grand Piano)

CAMBRIDGE

SPACEWARD RECORDING STUDIOS SPACEWARD RECORDING STUDIOS 19 Victoria Streat, Cambridge Tel: (0223) 64263 24 hours 16T from £140 p/d. £14 p/h. 2T £12 p/h. Video recording. D. tf. R-R.-C. C-C. CP. Ka. Dc. d-t. no OTC. Ac. SM production, arrangement, location and live recording and PA in Europe ba.

COVENTRY

HORIZON STUDIOS Horizon House, Coventry CV3 6QS Tel: (0203) 21000 16T. £25 p/h. CAP. 20. D-C. tba. R-R. R-C. Ka. SM. tba. SPEC. rates by day. Shortly going 24T.: Rates to remain the

DEVON

ANNOUNCEMENT P.A. HIRE
14 Swan St., Torquay, Devon
080428 278
8T (1" Leevers-Rich) £8 p/h. £60 p/d.
(includes tape allowance) no OTC, R-R-C-Cr, Cp, Mix. Pro P.A. Hire to 4Kw.

BLAZE RECORDING STUDIO 23 Belgrave Road, Torquay, Devon. 0803 22833 8T £5.50 p/h. D. CP. RC. Mix. DC. M. S. Ac. free in hotel, SM.

GLOUCESTERSHIRE

MILLSTREAM RECORDING STUDIOS Vernon Place, Cheltenham Vernon Place, Cheltennam. Tel: 0242 43243 16T £16,00 no OTC. Cap. 6 mus (£160 p/d). D. tf, R-R-R-C. CP. Ka. M. S. SM. ba. AC. ba.

TELECOMMS 189 London Rd. North End, Portsmouth, Hants. Tel: (0705) 60036 Ask for Mike, ME, Di, T & C, PA-CM,

HEREFORD

CHAPE LANE STUDIO CHAPE LANE STUDIO
Hampton Bishop, Hereford
0432 73430/73437
24T £26 p/h. 16T £20 p/h. 8 hr. day.
Cap. 18. R-R. CP. RC. M. S. AC.
ARP Omni and Yamaha CP30 Elect.
Piano, Mikes — AKG, Bayer, Neuman,
Amek mixing console 28 into 24 24T
Lyrec, Steuder 27 Master Revox, Sony,

MODELLO SOUND Eardisley, Herefordshire (on Powys boarder) 054 46 538/0568 4645

1054 40 538/0008 4040 ST £50 p/d (10 hrs.), Cap 8 TF. R-R-R-C. SM. AC (ba.) SM Master room reverb. Quad/Tannoy, DBX, Piano, Organ, Drums, Fazer, Flanger, ADT,

THE STUDIO THE STUDIO
Liancloudy, South Herefordshire
098 1873 (contact Frank Boggie)
6T, £16 p/h. D. T-F. R-R. 1 St. KA. RC.
Mix. R-Cr. M. S. BA. Selection of
guitars and drums, PV, amps for use in
studio. No charge Chitton mixing desk.

HUDDERSFIELD

SEPTEMBER SOUND STUDIOS 38 Knowl Road Golcar, Huddersfield, HD7 4AN 0484-658895/6 16T, Cap 45 £20 p/h. p/d ba D, R-R, R-Cr. R-C ba CP, M. S. vs Ac. ba, SM. ba Oba, Ka Drums.

HUMBERSIDE

FAIRVIEW MUSIC Willberby, Hull, N. Humberskle, 0482 653116 8T, £10 p/h Cap 10 p/d tf. R-R. CP. Ka. RC. dt. M. S. SM.

LANCASHIRE

CARGO RECORDING STUDIO Kenyon St., Rochdale Lancs. 0706 524420 16T £15 p/h, £130 p/d, 8T, - £8 p/h, £70 p/d, 10 hour day, 10% for cash 1 hr. free set up time.

CASTLE RECORDING STUDIO 93 Castle Hill Road, Hindley, Wigan, 0942 58777 8T, Cap 20, £10 p/h, R-R, Cp, Ka, R-C, D-T, \$, VS, Ac(ba), SM(ba), Mix, LIVERPOOL

AMAZON RECORDING STUDIO Stopgate Lane, Simmonswood, Liver-pool L33 4YA.

St. 2.

1.) 24T £27 p/h Daily Rate Cap 35. D.

1-F. R-R. CP. Ka. (Yamaha CS80, Polymoog, ARPOMNI III, Steinway, Hammond C3) R-C. Mix. d-t. MS. Ac.

2.) 8T £75 p/d Cap 10. 1-F, R-R. CP. Ka. (as above) R-C. Mix. d-t. MS. AC. tba.

AUGUST SOUND STUDIO 16 Benson Street, Liverpool 1. 051 708 0006

16T p/d neg. 8T £10.50, £86 p/d (inc. spool & tape) Cap 8. tf. R-R. R-C. CP. Ka. (Bechstein Piano, Hammond organ, Moog synth). NO OTC M-S. AC ba.

CONCERT RECORDING STUDIO 20 St. Mary's Rd., Huyton, Liverpool L36 5\$\$ 051-489 2990, 051-489 7967 US1-489 2890, US1-489 7957 8T, £9.40 p/h, £80 p/d. Cap 5. O.T.C., Ka. Broadwood concert grand piano, SM. RR: RC. (tam Revox Mxr. Rebis Quad, Kef Orban AKG, etc.

RMS STUDIO 145 Wardour St., London, W.1. Tel. No.: 01 - 734 5784/5572

LONDON

Studio 1 Trident Console, Studer 8 - track, Large Acoustically treated Studio area Spacious comfortable control room. Grand Paino etc. 8T - £30/hr.

Studio 2 Soundcraft Console, Teac 4 -track/Voice Booth 4T - £20/hr. A/V programme facilities - £1 £20/hr. Production/; Listening/Copying/ Transfer/ Facilities.

ARCHIPELAGO STUDIO
1 Moreton Terrace Mews South, Pimlico Pimilico
London SW1
8T£7 p/h Cap 15, t-f, R-R. 1St. Ka. RC.
Mix. M. S. ba. SM.
Apex 8T, Revox B77 mixing down,
Allen & Heath 16 into 8 mixer all effects,
space echo Reverb, compression,
graphics, ADT, Full.

ALVIC STUDIO 13 All Saints Road, Wimbledon, SW19 01-542 5696 4T Cap 8, £6 p/h, ba, tf, R-R, CP R-C, Piano, M, S, SM, ba, Drums, Amps.

BASING ST. & ISLAND MOBILE STUDIOS 8-10 Basing St., London, W11 01 229 1229 Studio 1; £52 p/h up to 6pm, £60 p/h after 6, weekends and public holidays. Studio 2: 24T MCI JH 500 series console with computer, £60 p/h. 10am to 6pm, £70 p/h otherwise.

145 Wardour St., London W1. Tel: 734 5784/5572 8T £25. DBX noise reduction. Acoustically treated studio and large control room. Full production and copy-ing facilities. Session musicians

B.T.W. RECORDING STUDIO 125 Myddleton Road, Wood Green, London, N22. 01 888 6655/449 6110 01 888 6656/449 6110 4T £7.50 p/h, 8T £11.00 (block booking £10), ff. R.R. Ka. dt. M. s. sm. dbx noise reduction. Alice 12-48 desk. Tan-noy and Auratone monitors, MXR

DECIBEL STUDIOS 19 Stamford Hill, London N16 01 802-7868 24T £27 p/h, p5D, neg. Cap 20, D, tf. (1 Ampex 1 Studer), R-R CP, Ka, (Yamaha Grand and Synth), R-C, d-t, Q, OTC £2. M.S. fcf. Ac ba. SM.

PATHWAY STUDIOS 2A Grosvenor Avenue, London N5 01-359 0970 8T £10 p/h, Cap 6, R-R, CP, R-C d-t.

DICK JAMES MUSIC James House, 5 Theobalds Road, WCI XRSE A85£ (01) 242 6886 2ST 24T Cap 30. £55 p/h, 46T mix/rec, £75 p/h, (no OTC). Remix £45 p/h, D, t-F, R-R, CP, Ka (Steinway) R-C, Mix. R-Cr, Comp, Mix, DT, Q, OTC £10 p/h, MS, Ac(tba) SM, (tba).

DUFFY'S RECORDING STUDIO 131A Anerley road, Crystal Palace, Lon-

To TA Aneriey road, Crystal Palace, London SE20, 01-778 0450, 01-701 2054 8T Cap 8, £8 p/h, R-R, RC, Mix, R-Cr. Drums, synths, piano, amp, DE varispeed, 16T into 8 mixer. ½" box.

varispeed, 161 into 8 mixer. ½" box, ELEPHANT RECORDING STUDIOS 1874 Long Lane, London SE1 Tel. Nos: 373 5573 & 403 3505 8T £6.50 p/h or £35 p6hrs (exc. tape hire), £50 per 8 hours, everything includes Cap 8. tf. (Brenell 8-track — Revox/Teac 2T), R-R. Cp. Ka. (Piano String syn), R-C. M. S. SM. ba.

FAST BUCK STUDIOS Lamb House, Church Street, London, W4 01-994 3321

01-994 3321
8T Cap 10 £8 p/h. £60 p/d. D. T-F. R-R. 1St. CP. Ke. RC. Mix. R-Cr. DC. d-t. M. S. VS. BA. SM. Desk-Sound Technics, Brenell Mast track, Revox — AKG, Bayer mikes, Tannoy speakers, graphics, drum machine tape and elect. Elka string machine, synths, guitars, drums, parking easy access.

FREERANGE STUDIO 22 Tavistock St., W.C.2. VV.C.Z. Tel: 836 7608 24T. £24 p/h. (6 hrs £19 p/h). Cap. 30 t-f. R-R. CP. Ka. (Grand Pianol R-C. Mix. d-t. MS. FcF. VS. tba. Ac. tba.

GOOSEBERRY STUDIOS GOOSEBERRY "ONE" 2 Hillside Road, SW2 (01) 674 0548 24T £30 p/h (Bl. Bks. Neg.) Cap 40. D-Mix. R-R. CP. R-C. d-t. MS. SM. tba. Ka (Hammond organ, Yamaha

grand). GOOSEBERRY "TWO" GOUSEBERRY "IWO 19 Gerrard Street, W1 (01) 437 6255 and 734 2257 16T £16 p/h. Cap 15. D. R-R. CP. Mix. R-C. Ka. (Grand, Roland SH2000 syn.

Hammond) HEART AND SOUL RECORDING

HEART AND \$00L RECORDING 189 Hainault Rd., E.11 Tel: 558 3344 8T-24T. £8-£18 p/h. p/d NEG. R-R. R-C. CP. Ka. DC. tba. No OTC. AC. SM. £1.15 per Track. KONK STUDIOS Kinks Production Ltd. 84-86 Tottenham Lane, Hornsey,

London N8. 01 340 7873/340 4757 01 340 78/3/340 4/5/ 24T. Cap. 36. £40 p/h between 6 after six weekends £6 O.T. p/h Kneve Necan Computer, neve Console, D. R-R. 1St. Ka, RC. Mix. Neve Necan Comp. Mix. (£10 p/h surcharge).

MARGRITTE MUSIC 15 Holloway Lane, Harmondsworth, West Drayton, 01 897 9670

16T. £20 p/h 8T £10 p/h. Cap 12. DC/ba. tf. DBX, SM, Ka. R-R-C. all rates negotiable. Fender, Marshall and more available.

MAJESTIC STUDIOS 146 Clapham High St., London SW4 01 622 1228/9 24T £45 p/h Cap 50 46T £65 p/h R-R, DBX, CP, OTC £7 p/h.

MARQUEE STUDIOS

10 Richmond Mews, Dean Street, W1. 437 6731/2
24T/16T £44 p/h. p/d neg. Cap 35. D. tf, R-R-R-C. d-t. CP. Ka. (Steinway), £8 p/h. OTC. MS. S. (Remix & Studio with MC1 1500 series automated consoles Live recording facilities to adicin. soles Live recording facilities to adjoining Marquee Club.)

NOVA SOUND RECORDING STUDIOS

27-31 Bryanston Street, London W1H 7AB.

7AB.
Enquiries Pat 01 493 7403
25T. Cap 30. D. R-R. CP, Ka. (Steinway Grand) R-C. Mix. d-t. M. S. Eastlake TM 3T Monitoring, neve 40/12, 32 Mon. MCi 24T., Studer 2T., Neumman, AKG. E.V. 24 HR. carpark. PATHWAY STUDIOS

2A Grosvenor Avenue, London N5 01 359 0970 8T £8 p/h, Cap 6, R-R, CP, R-C, d-t. RAMPORT STUDIOS 115 Thessaly Road, London SW8 01 720 5066

Cap 40 8am-6pm 16 and 24T £45 p/h Cap 40 8am-spm 16 and 241 £45 p/h 6pm - 8pm 16 and 24T £55 p/h flat rate w/ends 16T £40 p/h 24T £55 p/h Bank holdidays incl. D & DBX Bosendorfer, Rhodes, Hammonds B3 Q.M.S. tf. R-R, R-C, R-Cr. d-t, SM, ba.

REGENT SOUND STUDIOS 4 Denmark St., London WC2 01.836.6769 16T £16 p/h Cap 20 R-R-C OTC, Sound Techniques Desk 18 x 16

ROCK STAR RECORDING STUDIO 63 Charlotte Street, London W1

01 637 0999
16T 3M machine, Scully mixdown machine. Plate Echo, Revox ADT, Phasing. 16T Cap 15 £16 p/h D. R-R. RC. OTC. M. S. AC. ba SM.

ROX BOX STUDIOS 92 Devonshire Road, Chiswick, W4 01 570 7821

4T £5 p/h, p/d neg. Cap 7 tf. R-R. R-C, CP. M. S. SM, ba. (Fender, Marshall, HH, Amps). Rehearsal Studios £2.00 p/h.

SAV STUDIOS

3AV 310005 26 Harrison St., WC1. 278 7893 16T £120 p/d 8T £24.50 p/h DBX. Cap 15. t-F. R-R. CP. Ka. (Piano) R-C, Mix. R-CR. d-t. Q. Car Park.

SCARF STUDIOS 24 Furze Street, London E3 01.967.1681

01 967 1981 8T, Cap 15. Days £7.50 p/h. Evenings £8.50 p/h. Over 8 hours 10% discount tf. R-R. 1St. CP. KA. RC, Mix. DC, M. S. BA. SM.

STAGE ONE 14 Sebert Road, Forest Gate E7 (01) 534 5472

101) 534 5472 16T £13 p/h. (24 hr Rec) Cap 10. R-R. R-C. R-CR. D-t. CP. Ka. (Acoustic piano, Wurlitzer piano, String synth, ARP svn) De MS AC SM.

TAPE COPYING SERVICES 199a, Gloucester Pl. NW1 Tel: 01-723 6301 SPECIALIST IN SHORT RUN CASSETTE DUPLICATION.

ROCK CITY SOUND STUDIO Sheperton Studio Centre, Sheperton, Middlesex

24T. £40 p/h. Cap 20. tf. R-R. 1St. CP. KA. A-C. Mix. d-t. Q. OTC (£5 p/h). M.S.VS. ba. \$M. Trident TSM Desk

THEATRE PROJECTS SERVICES LTD. 11-13 Neals Yard, Monmouth Street, London, WC2. 01 836 1168 Studio A: 8T £12 p/h and piano Cap 15

Studio A: 81 E12 p/h and piano Cap 15 (demo tape)
Studio B: M.S. £12 p/h Cap 6 (voice overs) R-R-C OTC.
Studio B: 87 £14 p/h Cap 6 (artistes Ideal for overdubs, mix downs, voice overs. Dubbing suite — sound effects.
All transfer facilities available.

T.M.C. RECORDING STUDIO 118 Mitcham Road, Tooting, London 01 672 4108/8488 01 6/2 4108/8488 24T £30 p/h. D. tf. R-R. CP. Ka. R-C. d-t. M. S. OTC. SM. Steinway Plano and Hammond Organ available. Scamp System ADT.

TRIDENT RECORDING STUDIO 17 St. Anns Court, Wardour Street, London W1. 01 734 9901 48 and 24 Track £60 p/h 48 Track mix £85 p/h. No O/T 48T. Cap 30. D. tf. R-R. St. CP. Ka. RC. Mix. Dc. dt. M. S. AC. ba. SM,

MANCHESTER

Central Sound Studios 91 St. James Street, Manchester M1 4PH 4PH 061 236 5562 8T. Cap 20 68 p/h. D. tf. R-R. St. CP. Ka. A-Cr. Mix. DC. dt. M. S. SM. Reduction on block bookings, Production and publishing done.

PLUTO STUDIOS 36 Cranby Row, Manchester 001-228 2022 24T, £40 p/h, p/d neg. D. t-F, R-R, R-C, R-Cr. Lyrec 24T, Trident series 80 30/24 desk. Studer stereo,

PAUL ROBERTS
20 Ellesmere Road, Chorlton-Cum-Hardy, Manchester.
8T Cap 10 £10 p/h. £75 9 hours, ft, R-R.
1St. CP. RC. Mix. M. S. AC. SM. EMI-BMW Speakers. Allen & Heath Mod-3 Bennell mini & MXR Digital-Delay Custom Built-reverb Quad 405-303 AKG-Bayer mikes full Ludwig set. Gib-son 335, Martin D18, Music Man bass Fender Strat, Roland guitar synth, Layed back interesting environment.

SMILE RECORDING STUDIO 59 Upper Chorlton Road, Manchester

061 226 5369 contact Steve Foley 16T Cap 20. £12 p/h £30 p/d R-R 1St. CP. Ka. RC. Mix R-Cr. dt. M. S. VS. AC. ba. SM. Producer available, refreshments, pool table, pinball. Cadey 16 Track, Revox B77 and A77 recording pressig, sleeve and label design.

MIDDLESEX LANE STUDIO 87 Deans Lane, Edgeware, Middx. (01) 959 8466 4T/8T fac. £4 p/h Cap 8, t-F, R-R, R-C. CP. MS. SM. (tba). No OTC (guitars, amps, cassettes avail. no ex. charge).

MAGRITTE MUSIC STUDIOS 15 Holloway lane, Harmondsworth, West Drayton, Middlesex. 01 897 9670

ST2 247, 16T with full AC. £350 p/d, Cap 12, DC, tha, t-F, DBX, SM, R-R, Mix, RC, Fender, Marshall & Avail.

ROCK CITY SOUND STUDIO Sheperton Studio Centre, Sheperton Middlesex

24T. £40 p/h, Cap 20. tf. R-R, 1St. CP, KA. A-C. Mix. d-t. Q. OTC (£5 p/h). M.S. VS. ba, SM, Trident TSM Desk.

NORFOLK WHITEHOUSE SOUND 70 Deveham Rd., Easton, Norwich, 0603 880766

8T. Cap 7, ff. R-R.CP. Ka. R-C. Mix. S. AC. SM.

NOTTINGHAMSHIRE RAINBOW SOUND LTD. Pearson Buildings, 26/28 St. James Street, Nottingham 0602 412749

8T £9.50 p/h, p/d ba, Cap 6 R-R, R-C, Ka, d-t, No OTC, M.S. Ac, ba, SM, ba, ra, o-t, No UTC. M.S. Ac, Da. SM. Da. Grand piano, Syn. string machine full select guitars, various percussion instruments. AOT phasing, stereo reverb, expander gates.

SIN CITY MUSIC OF NOHPONEX LTD. c/o Flat 1, 1 Shirely Road, Mapperley Park, Nottingham. 0602-624666

0602-624686 16T £12 p/h, £85 p/d (8 hours), 4T £6 p/h, £45 p/d (8 hours). Further dis-counts for longer periods. Cap 8 tf. CP. R-R. R-C. d-T. M. S. OBX, Ka. SM. & DC ba. Various instruments and amplification

available or by arrangement. New fully Professional Recording Equipment with excellent Accessories and Effects.

OXFORDSHIRE TELECOMMS STUDIO 189 London No., North End, Portsmouth. Tel: (0705) 60036 16T. Cap 8. £112 p/d. £18 p/h. tf. R-R. R-C. CP, Ka, Mix R-CR. D-t, M. S. SM.

WOODWORMS STUDIO Cropredy Nr. Banbury Tel: 029575-424 Specialists in acoustic music. 8T £6 p/h, Lots of extras. Contact: Dave Pegg.

SCOTLAND

BLACK GOLD RECORD PRODUC-TIONS LTD Solsgirth Studios, Langmuir Road, Kirkintilloch, Glasgow.

CASTLE SOUND STUDIO The Old School, Park View, Pen-caitland, East Lothian. 0875 340143 16T £22,50 p/h, Cap 50, t-F, R-R, C-C, R-C, CP, Ka, (Yamaha grand, Hammond organ, ARP syn, Mellotrom, Honky Tonk) D-t, AC, MS. CRAIGHALL RECORDING STUDIOS 68 Craighill Road, Edinburgh, EH6 4RL 031 552 3685

16T £27 p/h., p/d neg. D. tf. R-R. R-C. CP. Ka. (Steinway grand, Yamaha Str-ing Machine), d-t, Q. OTC, (+25% on basic after 6.00pm or Saturdays and Sundays), M. S. SM. ba. Ac. ba. (87 Mobile available, Prices on request).

SOMERSET TRIPLE 'M' RECORDINGS

Sedgemoor Road, Bridgewater, 0278 55562

8T Mobile Recording Vehicle. Gigs recorded, Demo Work, Record production. £8 p/h. £50 p/d, R-R. R-C. d-t. CP. SM, ba.

SUFFOLK

Octopus Studios: Blacksmiths Cottage: Saxham St., Stowupland: (04492) 76842, 8T. £7.50 p/h or £70 per 14 hr, day. SM. Ka. (Poly Moog & Pedai), t-F. R-R. R-C. CP. Mix. M. S.

SUSSEX AIRSHIP RECORDING STUDIOS 1 Argyle Road, Bognor Regis (0243) 822554 4T. Cap 6, £7 p/h, t-F, R-C, CP, Ka, R-C. Mix. R-Cr. d-t. MS. A-80 Master-

ICC STUDIOS Silverdale Road, Eastbourne, Sussex 0323 26134

uszs 26134 24T Cap 30. £28 p/h. (spec. weekly and deily rates). D. t-F. R-R. CP. Ka. (grand piano, Fender, Rhodes, Korg syn). R-C. Mix. AC. MS. SM. TYNE & WEAR

GUARDIAN RECORDING STUDIOS 26 Front St. Pity Me, Durham Tel: 0385 62896 24T £21,50 p/h, £150 p/d, 16T £16.50 p/h, £125 p/d, CP, DC, AC, No OTC.

WALES
BBC WALES
Stacy Road Studio, c/o Broadcasting
House, Llantrisant Road, Cardiff.
Tel: 0222 493053
16T £20 p/h, 8T £10 p/h. (Block bookings neg.), Cap 40, D. tf. r-R. R-C. d-t.
CP. Ka. (Bechstein Baby Grand,
Yamaha Electric Piano, Poland String
Synth, Drum Kit, Electric Organ), Q/ba.
OTC + 25% M.S. fcf. VS. AC/ba. SM.
(Also 22T facility available).

BROOKSIDE RECORDING STUDIO 46 Sandringham, Pen-y-Lan, Cardiff

(0222) 493284 4T, Cap & £4.50 p/h, Ka. Rc. Mix. S. M. CP. SM. ba. Acc. ba.

FOEL STUDIO LTD. Foel, Llanfair Caerainion Powy's Wales (093) 882 758573 16T Cap 10, £120 p/d, tf, R-R, CP, Ka. R-C, Dc, M, S, AC/ba, SM,

ROCKFIELD STUDIOS Amberley Court, Rockfield Rd., Monmouth 0600 2449/3625

0600 2449/3625
Studios 1 & 2, 241. 40 Channel Custom Built Mixer, Natural Acoustic Echo Room, Auxiliary equip, to cover all eventualities. ALSO Acoustically insulated Rehearsal Studio in 10 Bedroom country house, 1½ miles of fishing available. ALL prices on application on-

WORCESTERSHIRE

THE OLD SMITHY RECORDING STUDIO The Old Smithy, 1 Post Office Lane, Kempsey, Worecester. 0905 820566 24T £29 p/h. p/d ba. Cap 35 d. tf. R-R. R-C. Dc. CP. Ka. No OTC. M. S. VS. Ac. SM.

ROOK MUSIC Anglo House, Worcester Road, Stourport-on-Severn. Tel: 029 93 77626 8T. £10 pts. Cap 15. tf. R-R. R-C. CP. t-d. M. S. SM.

W. YORKSHIRE

LEADER SOUND 209 Rochdale Road, Greetland, Halifax, W. Yorks 0422 6161 8T £8 p/h, Cap 8, D, DBX, R-R, R-C, CP, Ka, (Piano), Dc, ba, M, S, Ac, SM, KEY FOR STUDIO GUIDE

Т	Track	R-Cr	Reel to Cartridge
Cap	Capacity	Oc.	Disc Cutting
p/h	per hour	Comp. Mix	Computer Mixing Facility
p/d	per day	d-t	Disc to tape
b	Dolby	Q	Quad
tf	Transfer facilities	OTC	Overtime charge
R-A	Reel to Real	M	Mono
St	Number of Studios	8	Stereo
CP	Copying	fef	Fully coated film
tbe	to be advised	V\$	Video Studio
Kai	Keyboards available	·AC	Accommodation
R-C	Reef to Cassette	ba	by arrangement
Mix	Mixing Facilities	SM	Session Musicians



THE P.A. COMPANY

Park House, East-Dulwich, London SE22 693 1734 AÇE P.A. HIRE

P.A. 1,000 watt-500 watt foldback. Graphics — Clark Tecknik, T & C. Di. CM. PA.

ACME P.A. HIRE Willow Bank, Leeds Road, Otley, Yorkshire

ANDROMEDA SOUND SYSTEMS ((RELAND) 1 Thirlmere Gardens, Belfast, BT1 55EF 0232 772491 Pa. SL. CTM. Sc. T & CME. R. CM. ST.

AXIS SOUND EQUIPMENT 58 Avon Road, Bournemouth, Dorset 0202 38246 ME. T & C. SL. Sc. Di. CM. PA. R.

BACKLINE EQUIPMENT HIRE 99 Church Road, Barnes, London SW13 01 741 0891/2555 ME, T & C. Di. CM, PA, R. Specialist in Ampeg and acoustic amplification, 24 hour repair service.

BAN ELECTRIC MUSIC 89/97 St. John Street, EC1 M4AB 01-253 9410/9079 ME. T & C. RhR. Ba. St. R. CM. (24 or

ELECTRO P.A. HIRE Rectory Lodge, Norton Church Rd., Norton, Sheffield 8. Tel: (0742) 749 739

PILEDRIVER EQUIPMENT HIRE 11 Harrison Gardens, Edinburgh 11, 031 337 1071 4K, 4 Way up to 2K F/B Backline, T &

EUROPA CONCERT SYSTEMS EUROPA CONCERT SOUND LTD.

11A Sharpleshall Street, London NW1 01 586 3848 PA Mixers, T & C CTM.

KC LIGHTING & HIRE 287 Prince Edward Road, South 287 Prince Edward Road, South Shields, Tyne & Wear. 0632 553251 — day 567895/569977 — eve T & C. SL. SC. Di/ST. 48 Kw Pyros Strobes and Ice Machines.

MITREX 95 Oldham Bd. Newton-Heath, Manchester. 061-205 8093 5K, 3K, and 1K Rigs with full F/B and crew, Also lights up to 20K.

METEORLITES PRODUCTION LTD. 8 Pinnocks Lane, Baldock, Herts. 0462 892121 Stage lighting hire and sales.

THE LONDON THUNDER CO. The Production Village, 110 Cricklewood Lane NW2.

01-450 8969 ME. T & C. CM. 20 upfront 12/4 stagemix. P.A. Contact Paul

OSLA LIGHTING 2a Walsworth Rd., Hitdrin, Herts. ME. T & C. SL. St.

MUSCLE MUSIC 74 Great Suffolk Street, London SE1 (01) 633 0065 ME, T & C. RhR. SL. CM. CTM. PA. 719 Market Road, London N7 01-607 0087/8 ME, PA, T & C. RhR, Sc. CM, Spec. in Yamaha equip. **PHASE HIRE** 'Upstairs Downstairs', Armley Ridge Leeds 12, 0532 632402 ME. T & C. CM. CTM. PA. Concert Sound for the Stars. PILEDRIVER EQUIPMENT HIRE 11 Harrison Gardens, Edinburgh 11. 031 337 1071 031 337 1071
4K. 4 Way up to 2K F/B Backline. St., Di. T & C.
ME. T & C. St. Di. PA. 16T Channel Mixer Frunt. MM. Rose-Morris. PAUL TANDY PA AND LIGHTING 91 Darley Avenue, Chorton, Man-chester, M21 2QR. Tel: 061-881 4505 ME. TC. RhR. SL. Di. CM. CTM. ST. PA. SALES. MAURICE PLACQUET HIRE 69 Jeddo Rd., London W12. 01-749 3232 PA. ME, T & C. RhR. Di, Cm. CTM. PANTHER SOUND HIRE Block 6/8, The Avon Trading Estate, Avonmore Road, West Kensington, London W4. 01-603 4438 Zoot Horn PA to 4000W. Backline ME. Storage RhR. T & C. MIDDLESEX 01-903 6455 T & C. CM. PA. 16 chan. SOUND EXPLORATION SYSTEMS PROTOLOG LTD. 465 Batterses Park Road, London SW11 4IR 01 228 8055/641 3137 T & C. SL. Di. CM. PA. SOUND SERVICES 1/8 Landor Road, London SW9. 01-274 6576 (24 hr. service).
"Probably the best little system in London." 2Kw front of house, 600w of TRACTOR MUSIC — K.T. AKOUSTICS HIRE Kenion Street, off Drake Street, Rochdale, Lancashire. 0706 56287

Allen Heath/Martin 28CM (20-channel monitors) PA, SL. (100kW), T & C. Di. WIGWAM ACOUSTICS WIGWAM ACOUSTICS St. Annes House, Ryecrost Avenue, Heywood, Lancashire, 0706 68766 Contact Mike Spratt. ME. T & C. SL. 24 CM. CTM, R PA to 5000 Watts, 30 into 8/2 mixer. Concert

24 hours, contact Chris, P.A. to 15,000 watts, T & C. SL. Di. 12 and 24 CM, CTM, R.

20 Belmont Park Road, Maidenhead,

WHALE AUDIO VISUAL

0628 21696

sound for the discerning musician.

KEY FOR HIRE COMPANIES

Musical Equipment ME Tac Transport & Crew Rehearsal Rooms RHA SL Stage Lighting Security Oi Disco CM CTM Channel Mixer Concert Tour Management Public Address Storage

LASSIFIED &

Customising Repairs

ACOUSTIC GUITARS HAND MADE J. MOON, LAMLASH, ISLE SFARRAN, SCOTLAND, TEL 07706461



NOT ONLY repairs, refrets, refinishing, set ups, PU rewinds, active EQ etc BUT ALSO custom built instruments and of course my Axis Range with active parametric EQ systems Tel: (01) 998 3101

Manson uitars

Hand made British quitars of professional quality Acoustic & Electric

IDNE ANDY OR HUGH CROWBOROUGH (08926) 4266

GEORGE LOWDEN FINE CUSTOM BUILT ACOUSTIC GUITARS TO ORDER ENQUIRIES. 6A HIĞH STREET. BANGOR, N. IRELAND (0247) 62981

HONEBONE **ELECTRICAL**

Efficient repairs to all solid state amplification equipment. One off requirements designed and manufactured. Ring MARK HONEBONE on 01-253 4399 ext. 463

REPAIRS WHILE WAIT

1 YEAR WARRANTY **AVAILABLE**

A.M. ELECTRONICS **LONDON SW16** Tel: (01) 677 5856

CHRIS ECCLESHALL

GUITARS EST. BUILDERS OF ACOUSTIC, ELECTRIC GUITARS, MANDOLINS AND DULCIMERS 17C-17B STATION PARADE, UXBRIDGE ROAD, W5 TEL: (01) 792 4,41

RONA

The best repairs & spares in Europe.

We'd need a page to tell you what we stock. Just call us for anything from an Allen key to a Zither 01-240 2610 string

BUY A GUITAR FROM

THE MAKERS! THE MAKERS!
SECOND-MAND AND VINTAGE
SPECIALISTS PROFESSIONAL
REPAIR AND REFINISHING
SHOPS HAND-MADE ELECTRICS ACQUISTICS AND
BASSES

CHRIS & ANDY'S GUITAR WORKSHOPS 27 Denmark Street, London, WC2

Tel: (D1) 836 0899 48 High Bridge, Newcastle-on-Tyne Tel: (0632) 27202

Адежно и Sdinburgh (031) 228 1704 Harrlepool (0429) 77111 THE OVERWATER GUITAR CO

MELVYN HISCOCK GUITAR BUILDER and REPAIRER

2A CAVENDISH ROAD, CLAPHAM, SW12 Tel: (01) 673 0025

GUITAR SURGERY

Cracked ribs, smashed heads, broken necks, rapid refrets. and resprays

Mike Cameron Tel: (01) 485 8283

TONEWOODS

For Guitar Makers. Wide range for Acoustic and Electric Guitars. Export, Trade & Amateurs supplied. Free catalogue. A. Highfield & Co., Rosewood House, Bridge Road, Downham Market, Norfolk

WATT-HALLEY **GUITARS**

COMPLETE GUTTAR REPAIR and CUSTOMISING SERVICE. FINE HAND MADE ELECTRIC GUTTARS

FROM STOCK OR TO ORDER
7 River Terrace,
Guardbridge, Fife, Scotland Tel: Leuchars (033483) 484

NOT SO MUCH A REPAIR MADE TO MEASURE

CUSTOM

JOHNSON & JONES 66 Dalston Lane. London E8 3AH Phone: 01-254 9331

Personal

RAPPORT

quite simply the best introduction service for intelligent people - all ages, nationwide.

Details:

stamp and age to

RAPPORT

Department 2C, PO Box 94, Oxford

ONCE UPON A TIME

Dateline introduced a new concept into the lives of millions of single men and women. Thirteen years on we are more in demand than ever and are happy that we have helped thousands of people, not just through love and marriage, though our success rate is high, but simply through bringing people tugether and expanding their social lives. Phone us or send for the full remarkable story to:

Dateline International, Dept. (INM) 23 Abingdon Rd.

938 1011 |

Dateline

MEET NEW FRIENDS IN YOUR AREA.

Free Brochure/List for the unattached, all with no obligation.

SUE CARR, Somerset Villa, Harrogate **Yorkshire** Tel: (0423) 63525

Records

AND CASSETTES STORM 133, Park Road Blackpool FY1 4ET Eng: (0253) 23095. (Studio)

For all your RECORD MANUFACTURING and RIE 12 SLEEVE DESIGN/PRINT RECORDS tel: 01 388 5771 requirements.

Rehearsal studios

ALLAN GORDON (Leyton) Special weekday 10-6 and Saturday evening £5.50, weekend 10-6 £8.50 evenings 5.30-11 00 £7.00, Fully equipped rehearsal room available at extra cost containing five amplifiers including H&H lead bass and P.A. ics : drum, electric piano 01-520 3706 / 8642

RECORD & TAPE **EXCHANGE**

's and Tapes of every kind bought, and sole and exhanged 40 Notting Hill Gate, London W.11 28 Pembridge Road, Notting Hill Gate, W. 11. 90 Goldhawk Road, Shepherd's Bush, W. 12. TELEPHONE 01-749 2930

GUITAR CRAFT

Custom Guitar building kits & accessories. Guitar & bass bodies direct replacements for all models, hand made from the finest quality maple/ash or mahogany. £££'s below retail prices, all models from £45 plus P&D

GUITAR BUILDING KITS

Of rare and unobtainable models '56 Strats, '58 V's, Explorers, Juniors, S.G.'s etc. Original or through neck construction, plus round bowl acoustics, or your individual design, ready fretted and sealed. Simple to finish, from £85 + P.P. Custom Pick-ups and rewinding service, brass handware, direct from the factory. Send S.A.E. for brochure to: → Guitarcraft, 185, Westgate Rd., Newcastle-upon-Tyne

(0632) 614037

SCIENTIFIC SERVICES

KENT REPAIRS TO ALL **GROUP EQUIPMENT** Tel: Folkstone 50145 106 Guildhall Street, Folkestone

EEL PIE

* 2 CAMERA VIDEO

8-TRACK RECORDING/ PLAYBACK

* PROFESSIONAL STUDIO £66 PER HOUR

Details: Eel Pie, Shepperton Studio Centre Telephone: (09328) 62688

CLASSIFIED ©

GUITAR MAKERS AND REPAIR MEN

Our mail order catalogue specialised contains timbers for necks, solid bodies, acoustics etc., glues. finishes, inlav materials, machine heads and a large range of accessories and books on construction.

Send 55p for catalogue, or SAE for details of a complete solid body guitar. Kit for only £75. STRINGS and THINGS 63 Far Gosford St.

> Coventry Tel: (0203) 24406



SONGWRITERS

ovalties, publishing etc., and interviews famous songwriters. Free copy from

SOWTER

Miniature Bridging Transformer

Type 4567 Outstanding performance with small size 7.

10K/10K for levels up to plus 20dBm.

Mumetal screening can 33mm diameter

22mm high. Leaflet with full details on request. P.O. Box 36, Ipswich, England. Tel; (0473) 52794

KEYBOARD HIRE

176 BARNSBURY ROAD LONDON, N1

607 8797/8798 - 837 6059

HARPSICHORDS ELECTRIC PIANOS

ORGANS SYNTHESIZER AND PRO-GRAMMING GUITARS PERCUSSION BACK LINE EFFECTS TUNING SERVICE

All equipment tlight cased it required CALL US FOR A COMPETITIVE QUOTE

TANOY HI

If you can buy them cheaper

INTERNATIONAL SONGWRITERS ASSOCIATION LTD

(IMARW), Limerick City, Ireland

DRUMMERS - SUBSCRIBE NOW TO SAM ULANO'S DRUM WORLD PUBLISHED FOUR TIMES PER YEAR

\$8,00 OUTSIDE THE USA - \$6,00 INSIDE THE USA SEND INTERNATIONAL M.O. OR CHECK ON USA BANK TO:

SAM ULANO
P.O. BOX 1126, RADIO CITY STATION, N.Y. 10019
THE ONLY PERCUSSION PAPER OF ITS KIND

SWAMP SOUNDS

SPECIAL SUMMER OFFER **5KW FRONT** 2.5KW F/B

£700 & VAT PER WEEK + FULL CREW AND TRANSPORT FOR BACKLINE RING NOW: OXFORD 45552

BUPRACTICE B DRUM KIT

WHY HAVE NOISE PROBLEMS? 5 drum complete practice and Excellent drumstics first Fully adjustable _EBUS Send stamp to Bill Sauders_84 Controll Avenue, Southall, Midds_Post attention 01578 2909 tearnings)
DELIVERY ANYWHERE IN THE UK

SWAMP SOUNDS SUMMER SPECIAL

5 KW Front 2.5 KW F/B £700 & VAT per week Including crew & transport for backline. Tel: (0865) 45552

GRETSCH DRUM & GUITARS

For best cash/PX deals, ring the Drum & Guitar Centre

we will refund the difference 🔂 COURT

ACQUSTICS LTD Cambridge 64410 🛵 01-359 0956

TELEPHONE ANSWERING MACHINES

Call in from any phone around the world to get your messages.

Also: Automatic Dialers; Cordless Phones; Multi-memory phones; Flip Phones; Zip Phones. Please phone for full list: MICROLINK (01) 455 8208 BOSE SOR's

Before buying check our price Fair with EQ £499.00 + VAT without EQ £473.00 VAT Contact us for Crown amps/ microphones/mixers etc. All at substantial discounts.

C.A.V.S. Ltd., 171 Chase Side Enfield, Middlesex Telephone: 01-363 6126

DRUM WORKSHOP

Recover your own drumkit from £25. New & reconditioned drums, stands, pedals for sale/P.X. Most recovering and repairs done while you 01-985 1344 After 11.30 a.m.

EARTHBEAT STUDIO

4-track — £6 p.h. Per Day — £35

We work for the musicians, not for millionaires 28 Dartford Avenue, Eccles, Manchester

Tel: Manchester (061) 707 2217



16 Track Studio for facilities for mastering or demos, 2" tape free use of Rogers drums, amps, cabs, keyboards, £13 per hour + VAT. 01-534 5472 (free brochure available)

PUBLICITY STICKERS

3½ dia. from £30 per 1.000

Metal badges various sizes. Send large SAE for prices etc., to: PHOTOLITH, 7 South Parade, Doncaster, Tel: (0302) 66345.

FIE BADGES

STILL 10% DISCOUNT 38mm Badges 100 from £16.20 55mm Badges 100 from £17.55 rts Posters Artwork

Be Seen-Be Safe

Tuition

WHAT HAVE ALL THESE DRUMMERS FAMOUS GOT IN COMMON?
Phil Colins, Keef Hartley, Bryson Graham

(Alvin Lee & Spooty Tooth) Grahem Broad (Bandit)

They have all had lessons from: Lloyd Ryan. — Have you? Tet: 01-836 4941/874 8619

TEAC 3440 1/4" 4 TRACK NOW IN STOCK - \$750

Also complete 4-track package deals - Mixers Amps — Multicores etc. Ring for quotation:

SPRINGTIME SOUNDS

MOUNTAIN STUDIOS

Comfortable, accoustically treated, 600 sq ft Studio Farmhouse with 7 bedrooms, lounge, colour TV, Sound System, pintable, TV games, etc.

PA, Backline and 8T Recording Available. Easy access M4. Rehearsal Rate: £30 per 24 hours

£180 per week (self-catering) Catering £5 per person per dav

Discount for block bookings Details and Brochure Tel: (055) 83 301

DODEKORION 4T.

.S.D. 16 into 4, Graphic E.Q., .B.x. Revox Instruments session husicians available Committed and neers know about music %5 p.m. E35-8hrs. Profits to atternative

Southampton (0703) 583814

COUNTY RECORDING SERVICE

For Super Quality Master Dacs, Demo Discs and Pressings. Scully lathe with our levest MKW80 Stereo Cutting System, size half-speed cutting for that very special disc. Dolby '8', Oolby '8' and DBX noise reduction. Telephone Bracknell (IO34464935, London Road, 9Infield, Bracknell, Berks RQ12 58S

Musical Instrument Makers & Repairers largest selection of tonewoods, tools & parts in the country. Callers or mail-order welcome!

Touchstone Tonewoods Ltd, 27 Lesbourne Rd., Reigate Surrey RH2 7JS

ELECTRIC GUITAR TUITION Funk, disco, blues, rock, jazz, intensive technique development on lead, rhythm chords, improvisation, theory, analys-ling solo techniques on Hendrix, Trower, Dimeola, Benson, Santana, McLaughlin, Beginners to very advanced. Hemel Hempstead (0442) 49939, tui-tion in Central London W1.

JAZZ/ROCK **FUSION**

Postal Guitar Tuition Emphasis on Improvisation.

Tel: Leeds 689 062

CAN YOU SELL?

In our current expansion programme we are looking for effective sales staff in Reading, Woking, Guildford and Crawley areas. Preferably experienced in demonstrating and selling group gear and accessories. If you can demonstrate, sell, are under 35 and enthusiastic, get in touch for a chat now!

ANDERTONS

Haydon Place. Guildford, Surrey, Tel: (0483) 38212

BETTER **BADGES** PRODUCTION PRICES

UNDER 500

1. ALL SMALL RUN PRICES INCLUDE VAT
2. ARTWORK MUST BE CORRECT SIZE
3. REDUCTION OF BYW ARTWORK £1

4. MORE THAN ONE DESIGN IN EQUAL QUANTITIES IS OK

D.I.Y.JONE OFFS

— ½ "용 %" — 20p each + 10p P&P

UNDER 100 - 1 1/5" & 2 1/4" Colour Xerox 10 off - £ 2.50 + 10p P&P 30 off - £ 6.60 + 20p P&P 50 off - £10.00 + 50p P&P

100 OFF

100 OFF B&W Colour 1" 1 %" + £11 £13 + 50p P&P 2 %" - £13 £15 + £1 P&P

500 & OVER

1. PRICES EXCLUSIVE OF VAT & CARR.
2. ARTWORK ANY SIZE, MUST BE COLOUR
SEPARATED
3. ALL DESIGN WORK EXTRA
4. 3 WEEKS DELIVERY

SET-UP

1st colour £10 extra colours + £15

MAKE UP 1" 1%" 1%" 1%" 2-" 500 — £25 £25 £30 £30 £35 1000 — £35 £40 £45 £50 £60

ALWAYS EXTEND DESIGNS BY 1/2" DIAM. FOR WRAP-AROUND

286 PORTOBELLO RD **LONDON W10** Tel: (01) 960 5513

SMART ART

Pre Contract Produce

1000 sq ft studio 10ch 500 watt PA 4kw sound-light Control room Revox VHS video Pentax prints

01-289-2944



ACOUSTICS LTD

Specialists for MXR Pro Range Revox products Quad gower/ore amos Switchcraft connectors Electro-Voice mics & speakers Atlas mic stands Merantz Superscope Rebis audlo

Atlas Mic Stands Trade & Export Inquiries Welcome

Tel: (01) 727 1046 28 Powis Terrace. London W.11





BIND YOUR COPIES OF INTERNATIONAL MUSICIAN & RECORDING WORLD

as you receive them, in the Easibinder. Sturdily made in luxury navy blue Balacron, with the title embossed in gold on the spine. Each binder comes complete with date pack and the necessary fittings; copies can be removed and replaced with ease.

Price £3.50 including postage, packing and VAT (UK only). Overseas postage extra at 25p.

Order Form for International Musician & Recording World Binders to:

Easibind Ltd., 4 Uxbridge St., London W8 7SZ.

I enclose PO/Cheque value...for...binders.

Name	•
Address	,

AD. **INDEX**

Acquestic Sound Systems
Allan of Grt. Yarmouth 168
Richard Allen
Aria & Co. 144
Rod Argents.
Audio Consultants. 188
Audio Reinforcement. 151
Axes
Axess
Regal Sound. A12 Regal Sound. A14 A15 A15 A15 Regal Sound. A14 A15 A
Beyer Dynamic. 12 IPC A9 REW A14, A15 Riggles 169 ITA 30 B C Rich 23 Reymond A14 A15 B C Rich 23 Reymond A15 A
Riggles
Brodr. Jorgensen. IFC, 40, 91-94, 139
R8G Jones Recording Studio.
Carlsbro Sales Equipment 63 JPS 34 RSD 132 133 Carlsbro Sound Centres 28 JVC A2, A32 Sain 167 Chase Musicians 64, 65 Keio Electronics 13,18 Schaller 168 Clavitune 167 Kemble 34,35 Schecter 3 Clear tone OBC Eddie King A6 Schneeder A4 Clef 178 John King 151 September Sound 168 Court Acoustics 111 Kitchens 69, 116, 117, 167 Shure 8 Court Acoustics 111 Lake Audio 167 Shaddow 178 Court Acoustics 111 Lake Audio 167 Shaddow 178 Curlee 12 Loudwater 154 Dave Sinns 108 Curlee 22 Loudwater 154 Dave Sinns 108 Custom Sound A1 Dean Markley 101 Soho Sound House 58 <t< td=""></t<>
Carlsbro Sound Centres. 28 JVC. A2, A32 Cerebrun. 141 Sain. 167 Chase Musicians. 64, 65 Keio Electronics. 13,18 Schaller. 168 Clavitune. 167 Kemble. 34, 35 Schecter. 3 Cleartone. OBC Eddie King. A6 Schneder. A4 Clef. 178 John King. 151 September Sound. 168 Court Acoustics. 111 Kitchens. 69, 116, 117, 167 Shure. 8 James T. Coppock. A11 Sigma/Turbosound. 123 Crate. 19 Lake Audio. 167 Shaddow. 178 Custom Sound. A1 Sigma/Turbosound. 123 D'Addario. 37 Dean Markley. 167 Shaddow. 178 Custom Sound. A1 Sisme. 122 D'Addario. 37 Dean Markley. 101 Soho Sound House. 58 Deutsches Institut. 74 CF Martin.
Chase Musicians 64, 65 Keio Electronics 13,18 Schaller 168 Clavitune 167 Kemble 34,35 Schecter 3 Cleartone OBC Eddie King A6 Schneder A4 Clef. 178 John King 151 September Sound 168 Court Acoustics 111 Kitchens 69, 116, 117, 167 Shure 8 Court Acoustics 111 Kitchens 69, 116, 117, 167 Shure 8 Court Acoustics 111 Lake Audio 167 Shaddow 123 Crate 19 Lake Audio 167 Shaddow 178 Curlee 22 Loudwater 154 Dave Sinns 108 Custom Sound A1 Dean Markley 101 Soho Sound House 58 Custom Solid A1 Dean Markley 101 Soho Sound House 58 Deutsches Institut 74 CF Martin 142 Sound and Stage 167
Clavitune 167 Kemble 34, 35 Schecter 3 Cleartone OBC Eddie King A6 Schneder A4 Clef. 178 John King 151 September Sound 168 Court Acoustics 111 Kitchens 69, 116, 117, 167 Shure 8 James T. Coppock A11 Sigma/Turbosound 123 Crate 19 Lake Audio 167 Shaddow 178 Curlee 22 Loudwater 154 Dave Sinns 108 Custom Sound A1 Dean Markley 101 Soho Sound House 58 Deutsches Institut 74 CF Martin 142 Sound and Stage 167 Di-Tapes A15 Dick Middleton 167 Sounds Plus 134 Dod 36 Mind 'N' Pick 169 Sound Wave 6, 7 Dunlop 126 Music Man IBC Statik 143, 145 Electronic Sound Systems 52 Music Man
Cleartone OBC Clef Eddie King A6 Clef Schneder A4 Clef Court Acoustics 178 Court Acoustics 111 Kitchens 69, 116, 117, 167 Shure 8 Court Acoustics 111 James T. Coppock A11 Sigma/Turbosound 123 Crate 19 Lake Audio 167 Shaddow 178 Curlee 22 Loudwater 154 Dave Sinns 108 Custom Sound A1 Sisme 122 D'Addario 37 Dean Markley 101 Soho Sound House 58 Deutsches Institut 74 CF Martin 142 Sound and Stage 167 Di-Tapes A15 Dick Middleton 167 Sounds Plus 134 Dod 36 Mind 'N' Pick 169 Sound Wave 6, 7 Dunlop 126 Mins A13 Sowter 104 Electronic Sound Systems 52 Music Man 1BC Statik 143, 145 Electro-Voice A16 Multivox 24, 25 Tap House 128 Eulipion 154 Music Serve A12 Transvivania Transvivania 128 FO
Clef. 178 John King. 151 September Sound. 168 Court Acoustics. 111 Kitchens. 69, 116, 117, 167 Shure. 8 James T. Coppock. A11 Sigma/Turbosound 123 Crate 19 Lake Audio. 167 Shaddow 178 Curlee 22 Loudwater 154 Dave Sinns. 108 Custom Sound A1 Sisme 122 D'Addario. 37 Dean Markley. 101 Soho Sound House. 58 Deutsches Institut. 74 CF Martin. 142 Sound and Stage. 167 Di-Tapes A15 Dick Middleton. 167 Sounds Plus. 134 Dod. 36 Mind 'N' Pick. 169 Sound Wave. 6, 7 Dunlop 126 Minns. A13 Sowter. 104 Electronic Sound Systems. 52 Music Man. IBC Statik. 143, 145 Electro-Voice. A16 Music Serve. A12 </td
Court Acoustics 111 Kitchens 69, 116, 117, 167 Shure 8 James T. Coppock A11 Sigma/Turbosound 123 Crate 19 Lake Audio 167 Shaddow 178 Curlee 22 Loudwater 154 Dave Sinns 108 Custom Sound A1 Sisme 122 D'Addario 37 Dean Markley 101 Soho Sound House 58 Deutsches Institut 74 CF Martin 142 Sound and Stage 167 Di-Tapes A15 Dick Middleton 167 Sounds Plus 134 Dod 36 Mind 'N' Pick 169 Sound Wave 6, 7 Dunlop \$26 Minns A13 Sowter 104 Morley 11 Stacato 146 Electronic Sound Systems 52 Music Man IBC Statik 143, 145 Electro-Voice A16 Music Serve A12 Tap House 128 <td< td=""></td<>
Sigma/Turbosound 123
Crate 19 Lake Audio 167 Shaddow 178 Curlee 22 Loudwater 154 Dave Sinns 108 Custom Sound A1 Sisme 122 D'Addario 37 Dean Markley 101 Soho Sound House 58 Deutsches Institut 74 CF Martin 142 Sound and Stage 167 Di-Tapes A15 Dick Middleton 167 Sound and Stage 134 Dod 36 Mind 'N' Pick 169 Sound Wave 6, 7 Dunlop 126 Minns A13 Sowter 104 Morley 11 Stacato 146 Electro-Voice A16 Multivox 24, 25 Eulipion 134 Music Serve A12 Tap House 128 Music Shop 10 Tour 21 Transylvania 128 FDH Music 163
Curlee 22 Loudwater 154 Dave Sinns 108 Custom Sound A1 Sisme 122 D'Addario 37 Dean Markley 101 Soho Sound House 58 Deutsches Institut 74 CF Martin 142 Sound and Stage 167 Di-Tapes A15 Dick Middleton 167 Sounds Plus 134 Dod 36 Mind 'N' Pick 169 Sound Wave 6, 7 Dunlop 126 Minns A13 Sowter 104 Morley 11 Stacato 146 Electronic Sound Systems 52 Music Man IBC Statik 143, 145 Electro-Voice A16 Music Serve A2, 25 Eulipion 134 Music Serve A12 Tap House 128 Farralane 154 Transylvania 128 FDH Music 163 Transylvania 128
Custom Sound A1 Sisme 122 D'Addario 37 Dean Markley 101 Soho Sound House 58 Deutsches Institut 74 CF Martin 142 Sound and Stage 167 Di-Tapes A15 Dick Middleton 167 Sounds Plus 134 Dod 36 Mind 'N' Pick 169 Sound Wave 6, 7 Dunlop 126 Minns A13 Sowter 104 Morley 11 Stacato 146 Electronic Sound Systems 52 Music Man IBC Statik 143, 145 Electro-Voice A16 Music Serve A2, 25 Eulipion 134 Music Serve A12 Tap House 128 Farralane 154 Tour 21 FDH Music 163 Transylvania 128
D'Addario 37 Dean Markley 101 Soho Sound House 58 Deutsches Institut 74 CF Martin 142 Sound and Stage 167 Di-Tapes A15 Dick Middleton 167 Sounds Plus 134 Dod 36 Mind 'N' Pick 169 Sound Wave 6, 7 Dunlop 126 Minns A13 Sowter 104 Morley 11 Staceto 146 Electronic Sound Systems 52 Music Man IBC Statik 143, 145 Electro-Voice A16 Muttivox 24, 25 Eulipion 134 Music Serve A12 Tap House 128 Farralane 154 Tour 21 FDH Music 163 Transylvania 128
Deutsches Institut. 74 CF Martin. 142 Sound and Stage. 167 Di-Tapes. A15 Dick Middleton. 167 Sounds Plus. 134 Dod. .36 Mind 'N' Pick. .169 Sound Wave. .6, 7 Dunlop. .126 Minns. A13 Sowter .104 Morley. .11 Staceto. .146 Electronic Sound Systems. .52 Music Man. .IBC Statik. .143, 145 Electro-Voice. A16 Music Serve. .A12 Tap House. .128 Eulipion. .134 Music Shop. .10 Tour. .21 Farralane. .154 Transylvania. .128 FDH Music. .163 Transylvania. .128
Di-Tapes A15 Dick Middleton 167 Sounds Plus 134 Dod .36 Mind 'N' Pick .169 Sound Wave .6, 7 Dunlop \$126 Minns .A13 Sowter .104 Morley .11 Stacato .146 Electronic Sound Systems .52 Music Man .IBC Statik .143, 145 Electro-Voice .A16 Multivox .24, 25 Tap House Eulipion .134 Music Serve .A12 Tap House Farralane .154
Dod. .36 Mind 'N' Pick. .169 Sound Wave. .6, 7 Dunlop. .126 Minns. .A13 Sowter. .104 Morley. .11 Stacato. .146 Electronic Sound Systems. .52 Music Man. .IBC Statik. .143, 145 Electro-Voice. .416 Muttivox. .24, 25 .24, 25
Dunlop \$\frac{1}{26}\$ Minns A13 Sowter 104 Electronic Sound Systems 52 Music Man IBC Statik 143, 145 Electro-Voice A16 Multivox 24, 25 Eulipion 134 Music Serve A12 Tap House 128 Music Shop 10 Tour 21 Farrelane 163 Transylvania 128
Morley
Electronic Sound Systems. 52 Music Man. IBC Statik. 143, 145 Electro-Voice. A16 Multivox. 24, 25 Eulipion. 134 Music Serve. A12 Tap House. 128 Music Shop. 10 Tour. 21 Farrelane. 163 Transylvania. 128
Electro-Voice. A16 Multivox. 24, 25 Eulipion. 134 Music Serve. A12 Tap House. 128 Music Shop. 10 Tour. 21 Farrelane. 154 Transylvania. 128 FDH Music. 163
Eulipion. 134 Music Serve. A12 Tap House. 128 Music Shop. 10 Tour. 21 Farrelane. 154 Transylvania. 128 FDH Music. 163
Music Shop
Farrelane
FDH Music
Freedmans
Chas. E. Foote
Future Film.,
Gain
GEC Mo Value
Tim Gental

Situation Vacant

Have vacancy for technical and research engineer. Successful applicant must have thorough knowledge of acoustic design related to loudspeakers, also market trends in this field. Remuneration will be in accordance with experience and ability. Please apply in writing first instance giving fullest details of career.

The



Radio Ltd **Bradford Road Gomersal** Cleckheaton W. Yorks BS19 4AZ

Shadow Transducers. Because there's a difference between louder and better.

Acoustic guitarists deserve to be heard. But not at the expense of altering subtle notes and overtones by electrification. Shadow tranducers give you the widest frequency range, the volume you need and all the pure, natural acoustic sounds your music demands without making your acoustic guitar sound electric. And you won't need a preamp.

So don't get lost in your group. Play acoustically and be heard. Natural acoustic sound without electrification. That's the difference between louder and better. Ask your dealer about Shadow transducers.



SHADOW OF AMERICA ELECTRONICS CO., INC. 22-42 Jackson Ave., New York 11101 USA SHADOW K&M

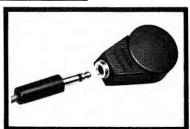
8520 ERLANGEN In der Zeil 39 WEST GERMANY

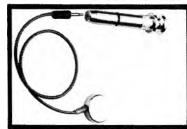


Model 2000 Removable Unit Adjustable volume

- control
- Reuseable adhesive
- 12' shielded cable

Model 2001 Removable Unit Reuseable adhesive 12' shielded cable





Model 2500E Invisible Permanent Mount Unit

- End Pin
- All mounting hardware
- 12' shielded cable

ELECTRONIC

Eight years of specialist design activity have been concentrated on providing a sound tonality recognizable to the conventional planist, with a non-linear touch response which gives a good instinctive link to dynamic control. Genuine one-man portability is obtained for a Six Octave instrument which has four intermixable Voices plus extra Electronic Effects of Tremolo, Multi-string detuning, and Phasing. U.K. manufacture and direct distribution to Retailers gives a considerable saving over the imported products similarly aimed at serious Plano simulation. For further information contact us at the address below or call in for a demonstration (please check show room opening hours by telephone).

This British built and designed Electronic Plano can be used by the beginner or pro. You can practice by plugging in headphones or you can record direct on to tape, making this instrument ex-tremely versatile to any & all levels of playing. It is light, easy to move but gives the full & pure tones of a normal plane WITHOUT THE COST!

FEATURES

- Six of 7½ Octave options.
- Touch sensitive on all voices
- Tuning electronically fixed on single internal control.
- Sustain and soft pedals.
- Combinations of piano voices and Harpsichord plus electronic effects.
- Headphone Output.
- Tape Record/replay socket.
- Power amplifier and internal speaker.
- Wood finish cabinet to match modern furniture.
- Piano top detachable from base
- Compact size.

71cm (28") Height 33cm (13")

Depth

Top Overhand Length 72 Note 114cm (45")

88 Note 137cm (54") Floor Space — both models 96cm x 30cm (38" x 12")

Low weight

72 Note Top 14 kgs 88 Note Top 17 kgs Base Unit 15 kas

Clef Products (Electronics) Ltd. 44a Bramhall Lane, Cheshire SK7 1AH Private and Trade Enquiries welcome (for more details fill out coupon below)

Post to: Clef Products 44a Bramhall Lane. Cheshire SK7 1AH

I am interested in a demonstration

Tell us about yourself Your age ☐ 14-18 ☐ 24-29 ☐ 19-23 ☐ 30 & over

□ Amateur ⊒ Pro ⊟ Fio □ Semi Pro

Amount spent yearly on instruments Less than £100

☐ £100-£250

☐ £250-£500 ☐ £500 & over



LARR

LARK

THE POWERFUL, PORTABLE PARK MIXER/PA.

Mi

A Member of the Marshall Group of Companies, 7 Dawson Road, Mount Farm, Milton Keynes, MK1 1LH, Tel: 0908-71662